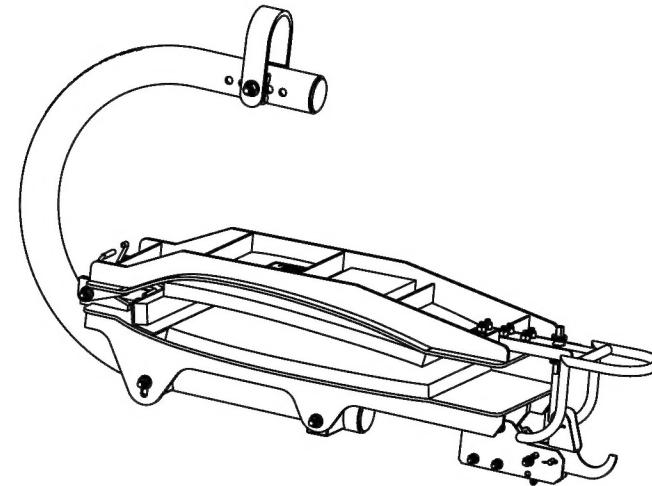
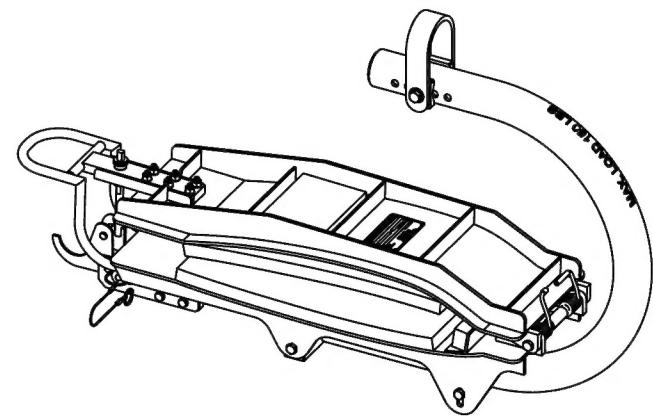


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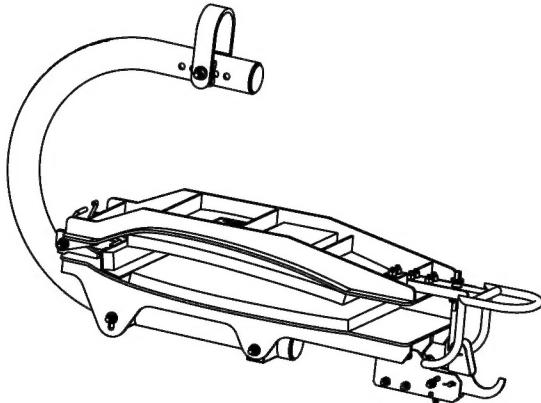
AEROSPACE

RBW6205G00632-3G

R
C

MAT'L		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
HEAT		$.XXX \pm .005$ FRACTIONS $\pm 1/8$	
TREAT		$.XX \pm .01$ ANGLES $\pm .5^\circ$	
FINISH		$X \pm .1$ SURFACES = 125	
SPEC		1. BREAK ALL SHARP EDGES $.015 \times .45^\circ$ OR .05R	
DRAWN BY:	GILBERT	2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
CHECKED:	CLOUGH	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
OPPS APPR:	ANDERSON	USED ON MODEL	
QA APPR:	LINDSAY		
APPROVED:	GILBERT	AW139	
SCALE	1:6	DATE	2/21/2013
SHEET 1 OF 47			

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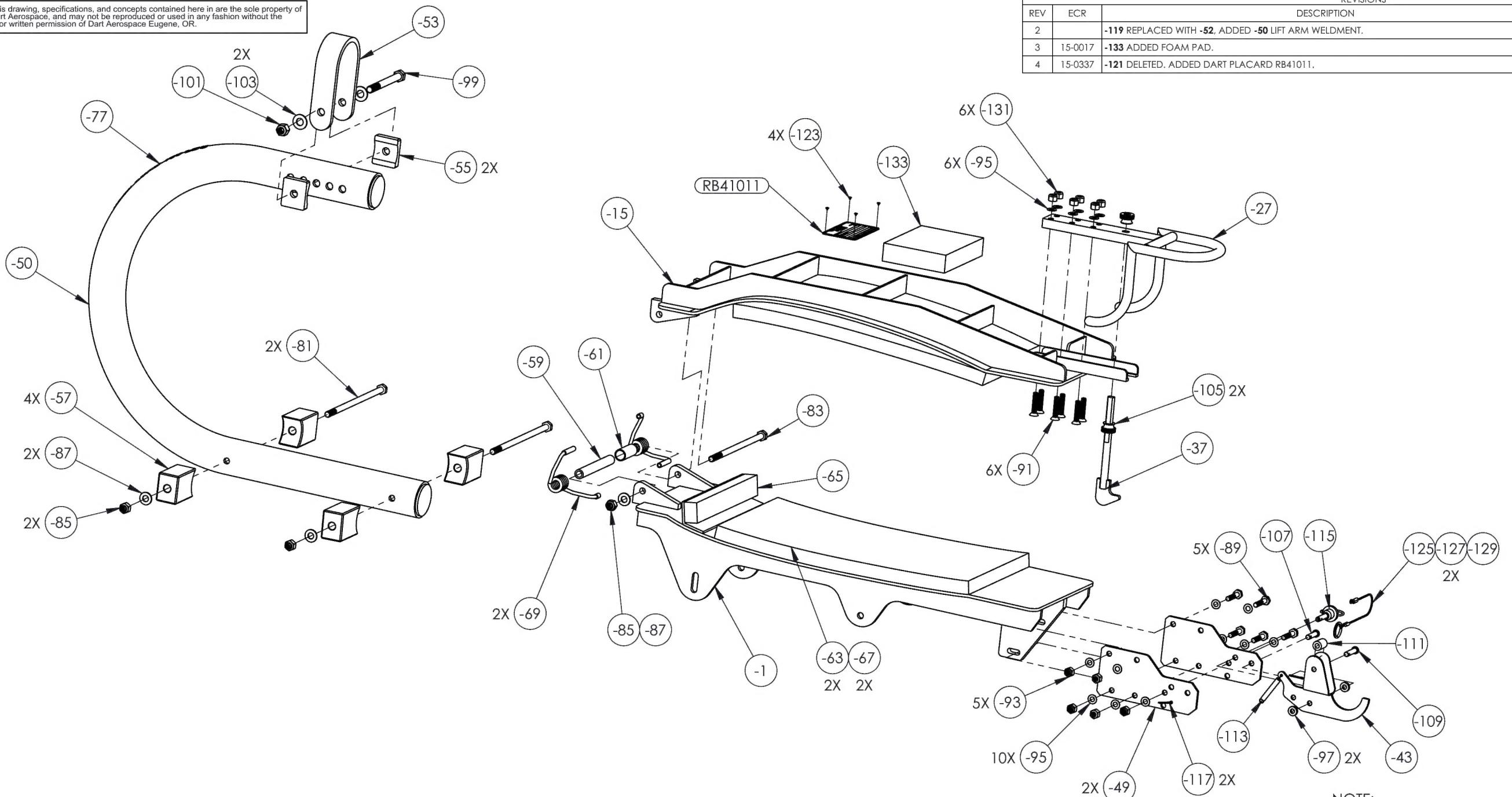


REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		-1 ADDED TOLERANCE WAS .945 IS .945±.03, WAS 5.950 IS 5.950±.03. -15 ADDED TOLERANCE WAS .945 IS .945±.03, WAS 5.950 IS 5.950±.03. CH'D TOLERANCE WAS 3.170 IS 3.17, WAS 2.580 IS 2.58. -39 CH'D THREAD WAS 3/8-24 IS 3/8-16. -45 ADDED TOLERANCE WAS .76 IS .76+.03-.00. -53 CH'D WIDTH TOLERANCE WAS 2.500 ±.010 -.000 IS 2.500 ±.05 -.00, CH'D HIEGHT WAS 1.375 IS 1.250, CH'D HOLE LOCATION WAS .688 IS .625, RADIUS WAS .69 IS .63, CH'D THICKNESS WAS .313 IS .25. -63 AND -65 CHANGED MATERIAL NOTE IN BOM. -71 ADDED NOTE 1 FOR ADDITIONAL SPRING INFORMATION. MATERIAL WAS STEEL IS S.S. -75 ADDED MISSING P/N BUBBLE. -93 CH'D QTY. WAS 11 IS 5. -113 ADDED DRAWING TO MANUFACTURE PART. -131 ADDED 6 NUTS.	7/1/2013	CFS	JAG
2		-13 CH'D DIM WAS 5.90 IS 5.950±.030. -45 ADDED AUX VIEW A-A & MISSING DIMS 2X R.50, 20°. -71 ADDED NOTE 2 FOR ADDITIONAL SPRING INFORMATION. -91 CH'D B/O INFO WAS MCMASTER-CARR #91771A562 IS MCMASTER-CARR #91771A563, DELETED -119 & REPLACED WITH -52, ADDED -50 LIFT ARM WELDMENT.	4/23/2014	DPD	GE
3	15-0017	UPDATED TO NEW DRAWING SATNDARD. -1 AND -15 CH'D WELD FROM 2-5 AND 1-3 TO SKIP WELD AS NECESSARY NOTE. -11 CH'D DIM WAS 1.219 IS 1.22, WAS R.25 IS R.38, ADDED NOTCHED TO AID IN POSITIONING. -21, -23 CH'D MATERIAL WAS 6061 IS 6063. -39 ADDED MISSING DIMENSION 2X R.03. -71 WIRE DIAMETER CH'D PER DENDOFF WAS Ø.155 IS Ø.170. -73 AND -75 CH'D TUBE ID WAS Ø.150 IS Ø.170, P/N WAS 5548K918 IS 5548K64. -133 ADDED FOAM PAD.	1/20/2015	RJC	JAG
4	15-0337	CH'D TOLERANCE ON ALL NON-CRITICAL DIMS. -3, -7, -9, -17, -21, -23, -25, -29, -31, -33, -37, -39, -41, -43, -47, -49, -52, -53, -59, -61, -63, -65, -67, -73, -75, -113. -133 CH'D TO SHEET METAL TOLERANCE. -51 CH'D DIMS WAS 4X .775 ±.010 IS 4X .775 ±.06, WAS 9.875 IS 9.875 ±.06, WAS 14.313 IS 14.313 ±.25. CH'D TO SHEET METAL TOLERANCE. -63 CH'D QTY. WAS 1 IS 2. -71 DELETED NOTES 1 AND 2. -121 DELETED. ADDED DART PLACARD RB41011.	10/26/2015	RJC	JAG
5	16-0164	UPDATED TO NEW STANDARDS. -1, -15, -27, -43, -49, -50, -53, -55, -57 REMOVED FINISH SPEC. -15 CH'D DIM WAS 1.250±.030/-0.00 IS 1.28±.03/-0.00, WAS 3.17 IS 3.16. -29 CH'D DIM WAS R1.00 IS R1.50. -50 CH'D SHEET TOL WAS ±.005/±.01 IS ±.010/±.03/±.1. -63 CH'D B/O INFO WAS 3/4 X 8 X 15-1/8 I.R. SPECIALTIES IS 3/4 X 8 X 15-1/8 (CASE SOLUTIONS). -65 CH'D B/O INFO WAS 3/4 X 1-1/8 X 8 I.R. SPECIALTIES IS 3/4 X 1-1/8 X 8 (CASE SOLUTIONS)	10/12/2016	SM	JAG
6	17-0031	-1 ADDED DIM 2X .33 NO WELD OUTSIDE. -3 ADDED DIM 2X FULL R. -7 ADDED DIM 6X FULL R. -9 ADDED DIM R.06. -13 CH'D DIM WAS 5.950±.030 IS 5.95. -15 DIMENSION ADDED 2X .33 NO WELD INSIDE; CH'D DIM WAS .945±.03 IS .945±.030, WAS 5.950±.03 IS 5.950±.030. -29 CH'D DIM WAS R1.50 IS 2X R1.50. -31 CH'D DIM WAS R.25 IS SR.25. -51 CH'D DIM WAS 4X .775±.06 IS 4X .78, WAS 9.875±.06 IS 9.88, WAS 14.313±.25 IS 14.563/14.063. -53 CH'D DIM WAS 2.500±.05/-0.00 IS 2.55/2.50. -57 CH'D DIM WAS Ø.41 THRU ALL ✓ Ø.45X90°, BOTH SIDES; WAS 1.97 IS 1.94. -59 CH'D DIM WAS Ø.50 IS Ø.500. -61 CH'D DIM WAS Ø.53 IS Ø.527. -63, -65, -65 CH'D MAT'L WAS 17124 IS T-20.	1/24/2017	SM	JAG

TITLE	
TOOL, M/R BLADE LIFTING	
DWG NO.	RBW6205G00632-3G
REV	6
MAT'L	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT	.XXX ± .005 FRACTIONS ± 1/8
TREAT	.XX ± .01 ANGLES ± 5°
FINISH	X ± .1 SURFACES = 125✓
SPEC	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
DRAWN BY:	GILBERT
CHECKED:	CLOUGH
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT
USED ON MODEL	AW139
SCALE	1:12
DATE	2/21/2013
SHEET 2 OF 47	

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REVISIONS			
REV	ECR	DESCRIPTION	DATE
2		-119 REPLACED WITH -52, ADDED -50 LIFT ARM WELDMENT.	4/23/2014
3	15-0017	-133 ADDED FOAM PAD.	1/20/2015
4	15-0337	-121 DELETED. ADDED DART PLACARD RB41011.	10/26/2015
			DPD DW
			RJC JAG
			RJC JAG

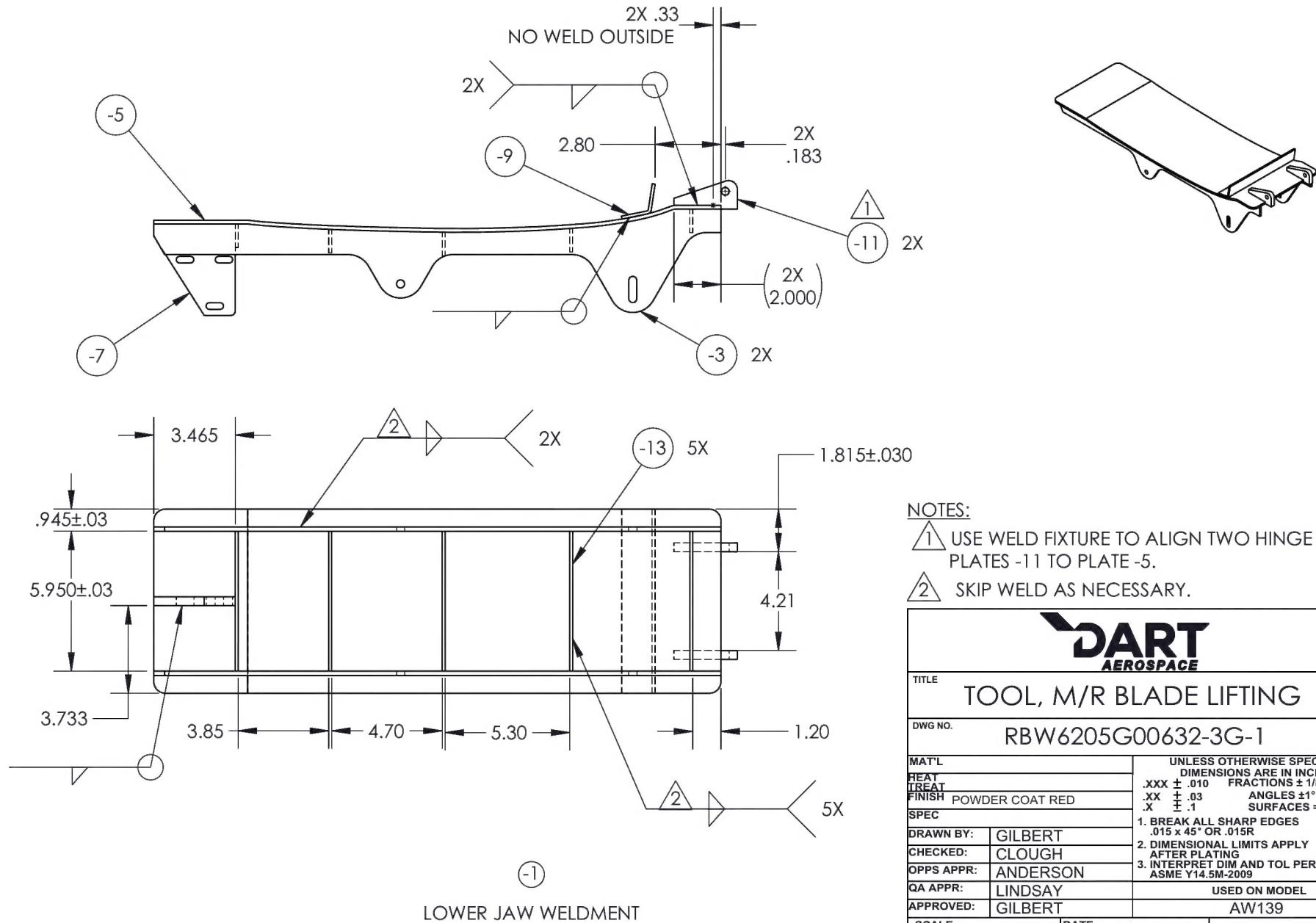


NOTE:
1. ATTACH FOAMS -63, -65, -67 & -133 USING AN APPROPRIATE ADHESIVE.

DART AEROSPACE																													
TITLE																													
TOOL, M/R BLADE LIFTING																													
DWG NO. RBW6205G00632-3G REV 6																													
<table border="1"> <tr> <td>MAT'L</td> <td>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES</td> </tr> <tr> <td>HEAT</td> <td>.XXX ± .005 FRACTIONS ± 1/8</td> </tr> <tr> <td>TREAT</td> <td>.XX ± .01 ANGLES ± 5°</td> </tr> <tr> <td>FINISH</td> <td>X ± .1 SURFACES = 125</td> </tr> <tr> <td>SPEC</td> <td></td> </tr> <tr> <td>DRAWN BY:</td> <td>GILBERT</td> </tr> <tr> <td>CHECKED:</td> <td>CLOUGH</td> </tr> <tr> <td>OPPS APPR:</td> <td>ANDERSON</td> </tr> <tr> <td>QA APPR:</td> <td>LINDSAY</td> </tr> <tr> <td>APPROVED:</td> <td>GILBERT</td> </tr> <tr> <td>USED ON MODEL</td> <td>AW139</td> </tr> <tr> <td>SCALE</td> <td>1:6</td> </tr> <tr> <td>DATE</td> <td>2/21/2013</td> </tr> <tr> <td>SHEET</td> <td>3 OF 47</td> </tr> </table>		MAT'L	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	HEAT	.XXX ± .005 FRACTIONS ± 1/8	TREAT	.XX ± .01 ANGLES ± 5°	FINISH	X ± .1 SURFACES = 125	SPEC		DRAWN BY:	GILBERT	CHECKED:	CLOUGH	OPPS APPR:	ANDERSON	QA APPR:	LINDSAY	APPROVED:	GILBERT	USED ON MODEL	AW139	SCALE	1:6	DATE	2/21/2013	SHEET	3 OF 47
MAT'L	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES																												
HEAT	.XXX ± .005 FRACTIONS ± 1/8																												
TREAT	.XX ± .01 ANGLES ± 5°																												
FINISH	X ± .1 SURFACES = 125																												
SPEC																													
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QA APPR:	LINDSAY																												
APPROVED:	GILBERT																												
USED ON MODEL	AW139																												
SCALE	1:6																												
DATE	2/21/2013																												
SHEET	3 OF 47																												
1. BREAK ALL SHARP EDGES .015 x 45° OR. 015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009																													

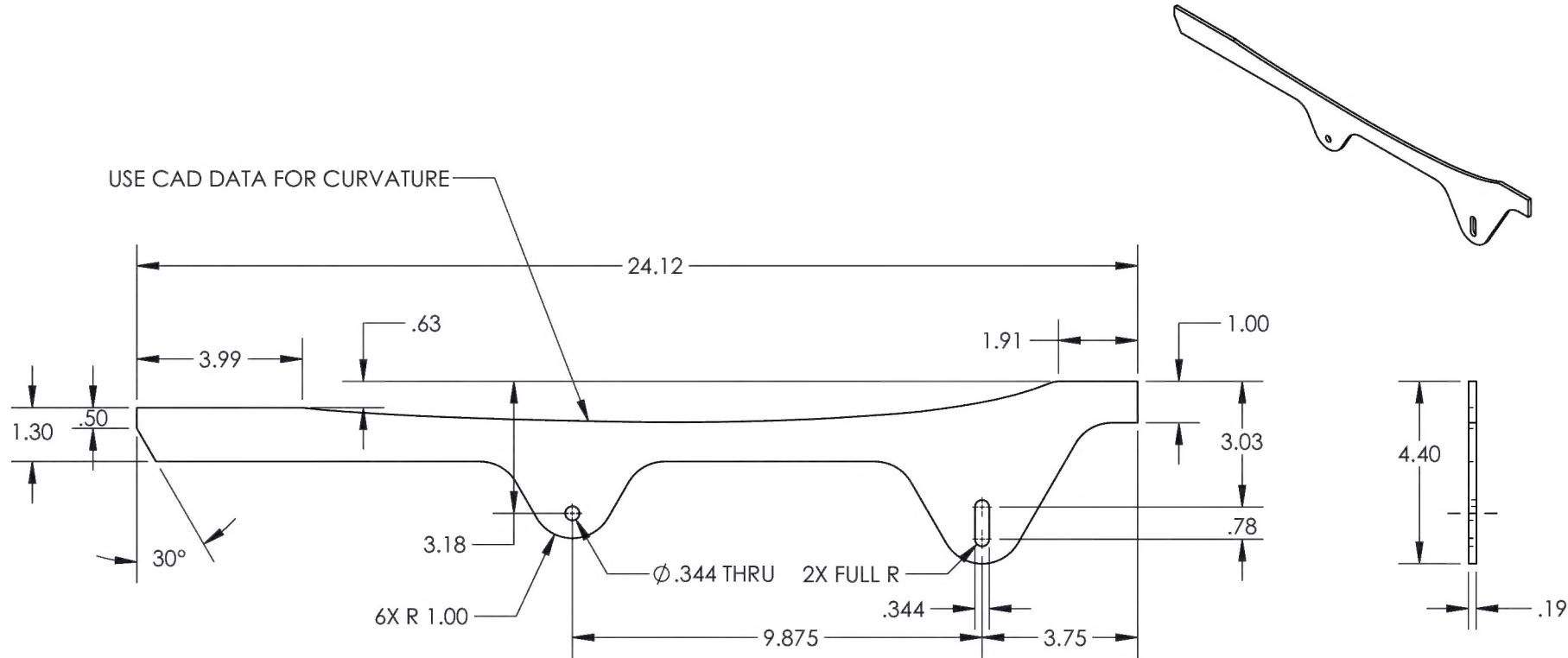
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			REVISIONS		
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		-1 ADDED TOLERANCE WAS .945 IS .945±.03, WAS 5.950 IS 5.950±.03.	7/1/2013	CFS	JAG
3	15-0017	-1 CH'D WELD FROM 2-5 AND 1-3 TO SKIP WELD AS NECESSARY NOTE.	1/20/2015	RJC	JAG
5	16-0164	-1 REMOVED FINISH SPEC.	10/12/2016	SM	JAG
6	17-0031	-1 ADDED DIM 2X .33 NO WELD OUTSIDE.	1/24/2017	SM	JAG



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			REVISIONS			
REV	ECR		DESCRIPTION	DATE	INITIAL	APPROVED
4	15-0337		-3 CH'D TO SHEET METAL TOLERANCE.	10/26/2015	RJC	JAG
6	17-0031		-3 ADDED DIM 2X FULL R.	1/24/2017	SM	JAG



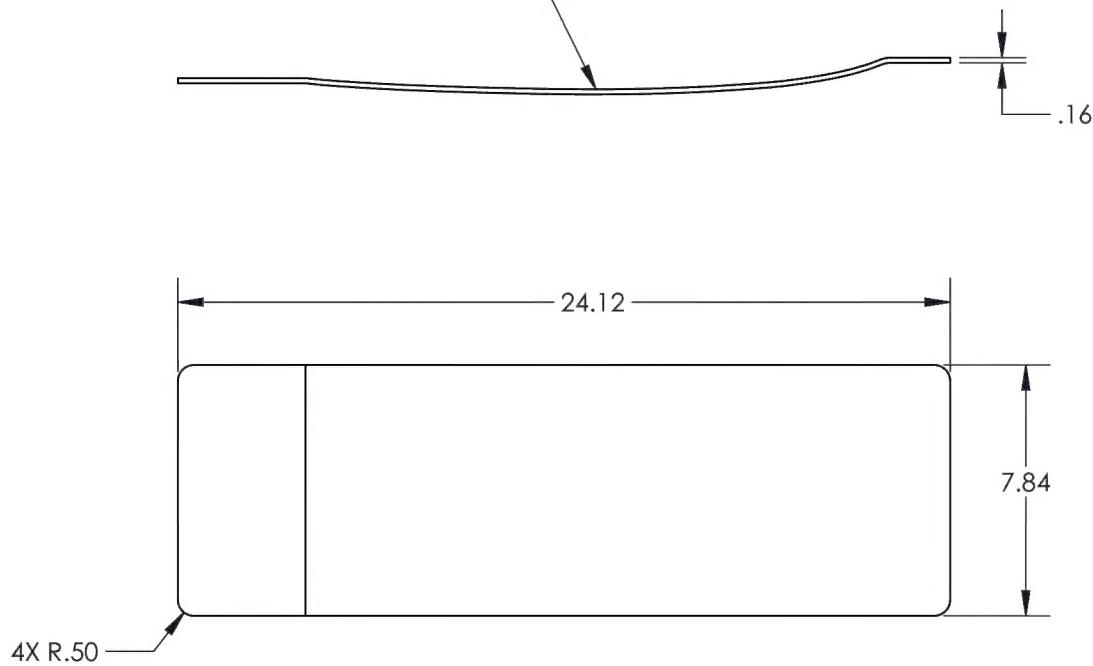
(-3)
LOWER JAW SIDE PLATE

DART AEROSPACE	
TITLE	
TOOL, M/R BLADE LIFTING	
DWG NO. RBW6205G00632-3G-3 REV 6	
MAT'L 6061 UNLESS OTHERWISE SPECIFIED	
HEAT DIMENSIONS ARE IN INCHES	
TREAT FRACTIONS $\pm \frac{1}{16}$	
FINISH SEE -1 WELDMENT ANGLES $\pm 1^\circ$	
SPEC SURFACES = 125	
SPECIFICATIONS	
DRAWN BY: GILBERT	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: CLOUGH	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: LINDSAY	USED ON MODEL
APPROVED: GILBERT	AW139
SCALE 1:4	DATE 2/18/2013
SHEET 5 OF 47	

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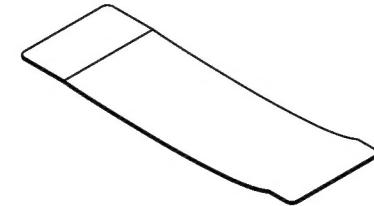
REV	ECR	REVISIONS	DESCRIPTION	DATE	INITIAL	APPROVED
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FORM TO FIT SIDE PLATES -3



(-5)

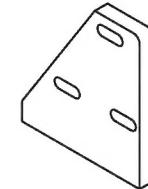
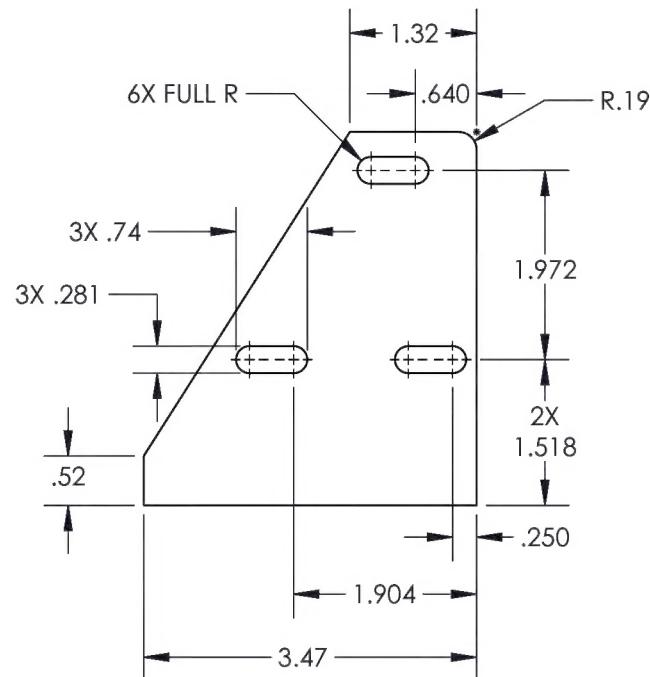
LOWER JAW FACE PLATE



DART AEROSPACE	
TITLE	
TOOL, M/R BLADE LIFTING	
DWG NO.	
RBW6205G00632-3G-5	
REV	6
MATERIAL 5052 UNLESS OTHERWISE SPECIFIED	
HEAT DIMENSIONS ARE IN INCHES	
TREAT FRACTIONS $\pm \frac{1}{16}$	
FINISH SEE -1 WELDMENT ANGLES $\pm 1^\circ$	
SPEC SURFACES = 125 ✓	
SPEC	
DRAWN BY:	GILBERT
CHECKED:	CLOUGH
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT
USED ON MODEL	
AW139	
SCALE	1:6
DATE	2/18/2013
SHEET 6 OF 47	

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			REVISIONS		
REV	ECR		DESCRIPTION	DATE	INITIAL
4	15-0337		-7 CH'D TO SHEET METAL TOLERANCE.	10/26/2015	RJC JAG
6	17-0031		-7 ADDED DIM 6X FULL R.	1/24/2017	SM JAG



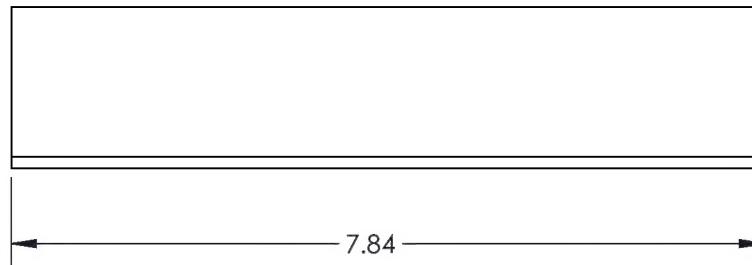
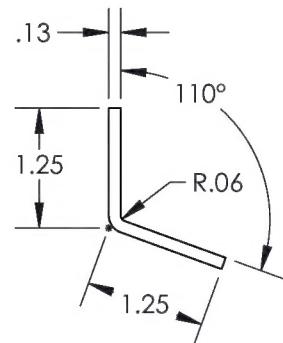
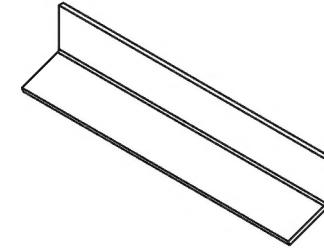
LOWER JAW LATCH PLATE

(-7)

DART AEROSPACE	
TITLE	
TOOL, M/R BLADE LIFTING	
DWG NO. RBW6205G00632-3G-7 REV 6	
MAT'L 6061 UNLESS OTHERWISE SPECIFIED	
HEAT DIMENSIONS ARE IN INCHES	
TREAT FRACTIONS \pm 1/8	
FINISH SEE -1 WELDMENT ANGLES \pm 1°	
SPEC SURFACES = 125	
DRAWN BY: GILBERT	
CHECKED: CLOUGH	
OPPS APPR: ANDERSON	
QA APPR: LINDSAY USED ON MODEL	
APPROVED: GILBERT AW139	
SCALE	1:2
DATE	2/21/2013
SHEET 7 OF 47	

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REVISIONS					
REV	ECR		DESCRIPTION	DATE	INITIAL
4	15-0337	-9	CH'D TO SHEET METAL TOLERANCE.	10/26/2015	RJC
6	17-0031	-9	ADDED DIM R.06.	1/24/2017	JAG



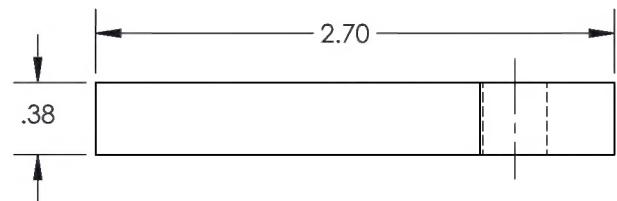
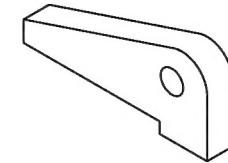
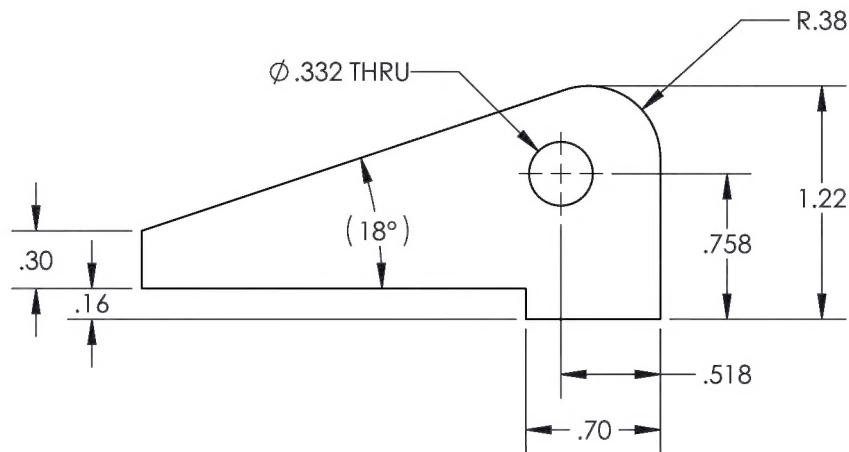
(-9)
LOWER JAW ANGLE

DART AEROSPACE	
TITLE	
TOOL, M/R BLADE LIFTING	
DWG NO. RBW6205G00632-3G-9	
REV 6	
MATERIAL 5052 UNLESS OTHERWISE SPECIFIED HEAT DIMENSIONS ARE IN INCHES TREAT FRACTIONS $\pm \frac{1}{8}$ FINISH SEE -1 WELDMENT ANGLES $\pm 1^\circ$ SPEC SURFACES = 125	
.XXX $\pm .010$.XX $\pm .03$ X $\pm .1$	
DRAWN BY: GILBERT CHECKED: CLOUGH OPPS APPR: ANDERSON QA APPR: LINDSAY APPROVED: GILBERT	
USED ON MODEL AW139	
SCALE 1:2	DATE 2/27/2013
SHEET 8 OF 47	

1. BREAK ALL SHARP EDGES
.015 x 45° OR .015R
2. DIMENSIONAL LIMITS APPLY AFTER PLATING
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
3	15-0017	-11 CH'D DIM WAS 1.219 IS 1.22, WAS R.25 IS R.38, ADDED NOTCHED TO AID IN POSITIONING.	1/20/2015	RJC	JAG



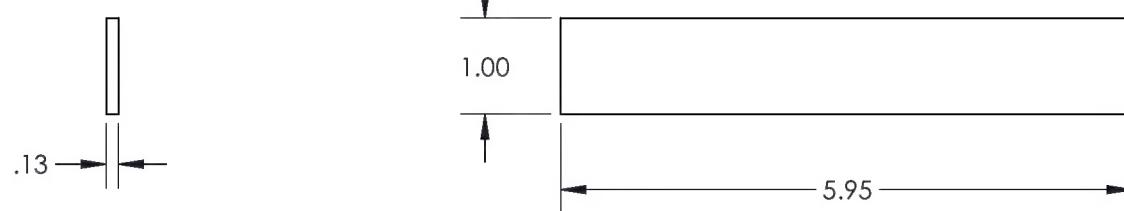
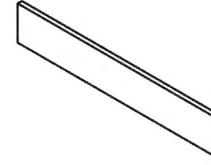
(-11)

HINGE PLATE

TITLE		DART AEROSPACE
DWG NO.		RBW6205G00632-3G-11
REV		6
MAT'L 6061		
UNLESS OTHERWISE SPECIFIED		
DIMENSIONS ARE IN INCHES		
.XXX ± .010 FRACTIONS ± 1/8		
.XX ± .03 ANGLES ± 1°		
X ± .1 SURFACES = 125 ✓		
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R		
2. DIMENSIONAL LIMITS APPLY AFTER PLATING		
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009		
DRAWN BY: GILBERT		USED ON MODEL
CHECKED: CLOUGH		
OPPS APPR: ANDERSON		
QA APPR: LINDSAY		
APPROVED: GILBERT		AW139
SCALE	1:1	DATE 2/21/2013
SHEET 9 OF 47		

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2		-13 CH'D DIM WAS 5.90 IS 5.950±.030.	4/23/2014	DPD	GE
6	17-0031	-13 CH'D DIM WAS 5.950±.030 IS 5.95.	1/24/2017	SM	JAG



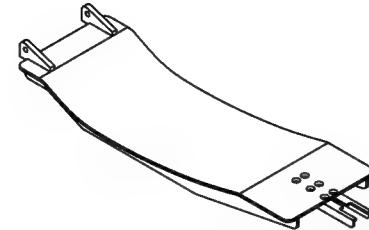
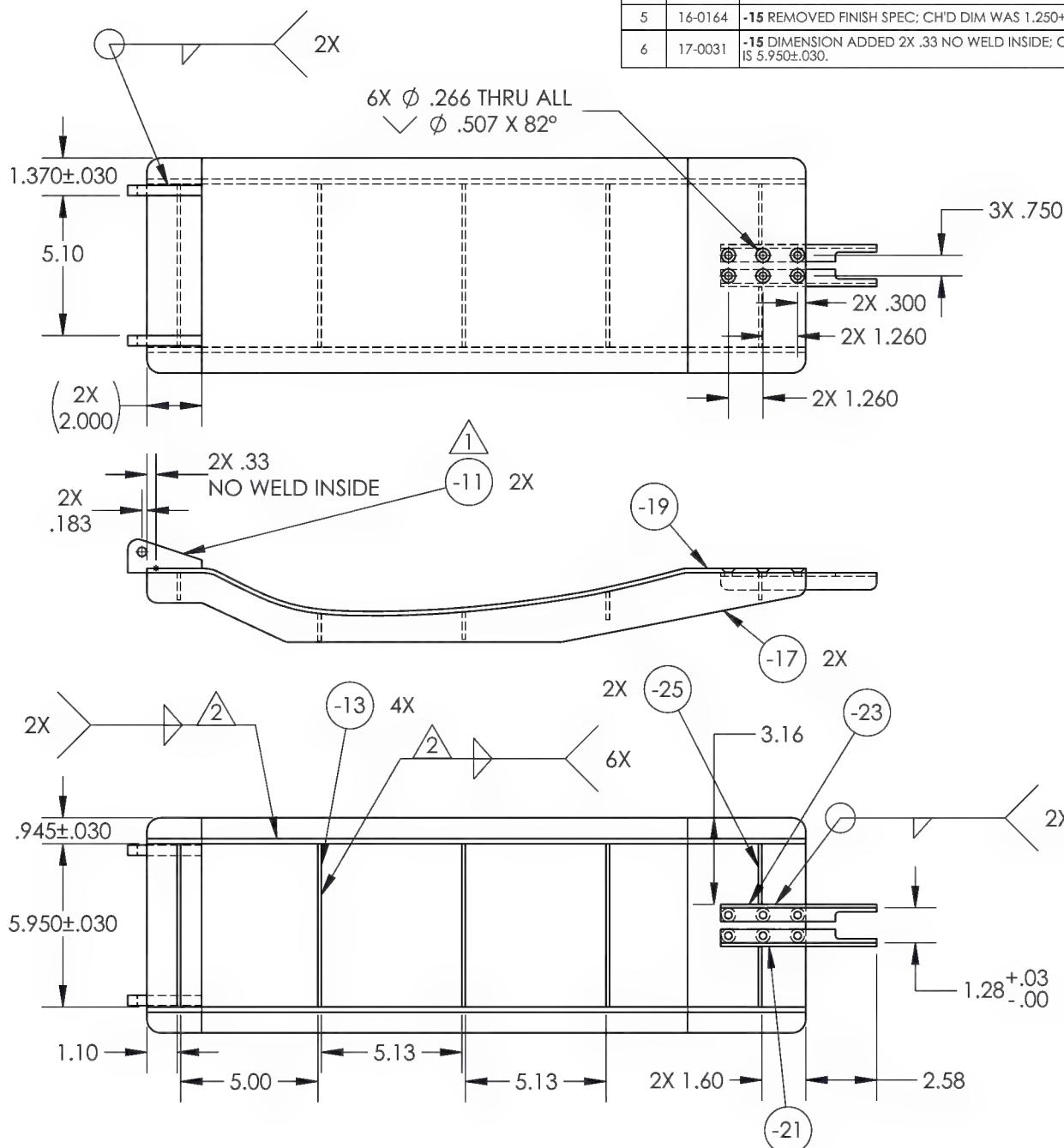
LOWER JAW BRACE

(-13)

DART AEROSPACE	
TITLE	
TOOL, M/R BLADE LIFTING	
DWG NO. RBW6205G00632-3G-13 REV 6	
MAT'L 6061 UNLESS OTHERWISE SPECIFIED	
HEAT DIMENSIONS ARE IN INCHES	
TREAT FRACTIONS ± 1/8	
FINISH SEE -1 & -15 WELDMENT ANGLES ± 1°	
SPEC SURFACES = 125 ✓	
DRAWN BY: GILBERT	
CHECKED: CLOUGH	
OPPS APPR: ANDERSON	
QA APPR: LINDSAY USED ON MODEL	
APPROVED: GILBERT AW139	
SCALE 1:2	DATE 2/21/2013
SHEET 10 OF 47	

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REV			ECR			DESCRIPTION			DATE			INITIAL			APPROVED		
1						-15 ADDED TOLERANCE WAS .945 IS .945±.03, WAS 5.950 IS 5.950±.03. CH'D TOLERANCE WAS 3.170 IS 3.17, WAS 2.580 IS 2.58.				7/1/2013	CFS	JAG					
3	15-0017					-15 CH'D WELD FROM 2-5 AND 1-3 TO SKIP WELD AS NECESSARY NOTE.				1/20/2015	RJC	JAG					
5	16-0164					-15 REMOVED FINISH SPEC; CH'D DIM WAS 1.250+.030/-0.00 IS 1.28+.03/-0.00, WAS 3.17 IS 3.16.				10/12/2016	SM	JAG					
6	17-0031					-15 DIMENSION ADDED 2X .33 NO WELD INSIDE; CH'D DIM WAS .945±.03 IS .945±.03, WAS 5.950±.03 IS 5.950±.03.				1/24/2017	SM	JAG					



-15

UPPER JAW WELDMENT

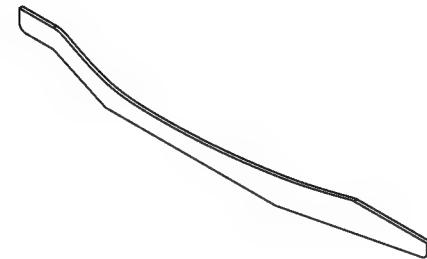
NOTE:

- 1 USE WELD FIXTURE TO ALIGN TWO HINGE PLATES -11 TO PLATE -19.
- 2 SKIP WELD AS NECESSARY.

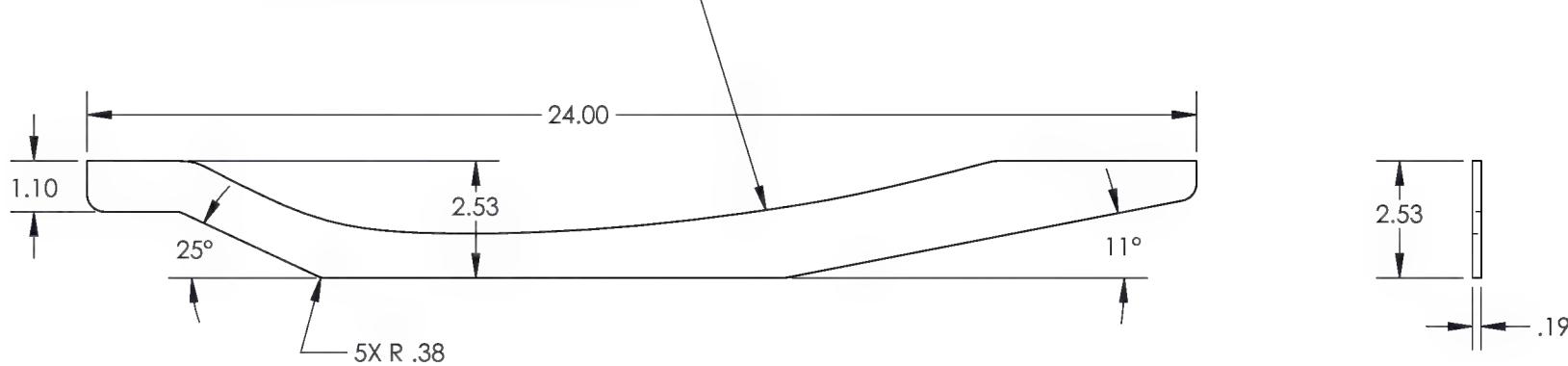
DART AEROSPACE	
TITLE	
TOOL, M/R BLADE LIFTING	
DWG NO. RBW6205G00632-3G-15 REV 6	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 1° X ± .1 SURFACES = 125	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
DRAWN BY: GILBERT	
CHECKED: CLOUGH	
OPPS APPR: ANDERSON	
QA APPR: LINDSAY	
APPROVED: GILBERT AW139	
SCALE	1:6
DATE	2/21/2013
SHEET 11 OF 47	

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REV			ECR			DESCRIPTION			DATE			INITIAL			APPROVED		
4			15-0337			-17 CH'D TO SHEET METAL TOLERANCE.			10/26/2015			RJC			JAG		



USE CAD DATA FOR CURVATURE



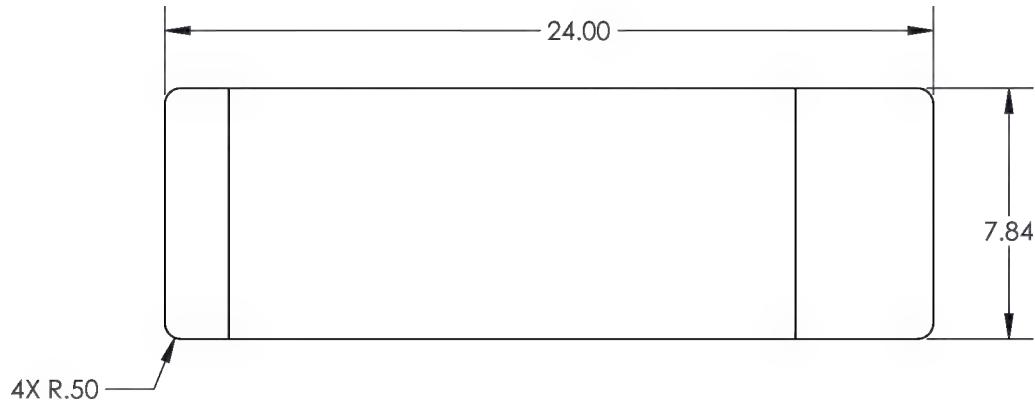
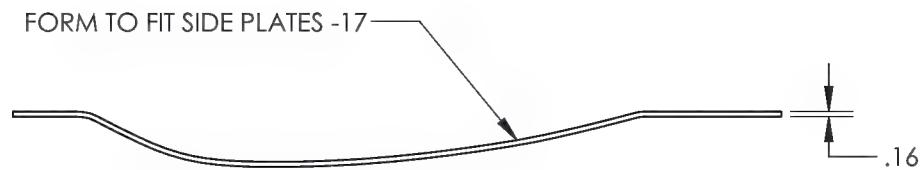
(-17)

UPPER JAW SIDE PLATE

DART AEROSPACE	
TITLE	
TOOL, M/R BLADE LIFTING	
DWG NO. RBW6205G00632-3G-17 REV 6	
MATERIAL 6061 UNLESS OTHERWISE SPECIFIED HEAT DIMENSIONS ARE IN INCHES TREAT FRACTIONS $\pm \frac{1}{8}$ FINISH SEE -15 WELDMENT ANGLES $\pm 1^\circ$ SPEC SURFACES = 125	
DRAWN BY: GILBERT CHECKED: CLOUGH OPPS APPR: ANDERSON QA APPR: LINDSAY APPROVED: GILBERT AW139	
SCALE 1:4 DATE 2/21/2013 SHEET 12 OF 47	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
USED ON MODEL	

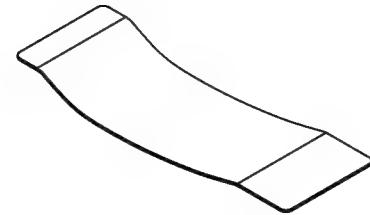
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REV	ECR	REVISIONS	DESCRIPTION	DATE	INITIAL	APPROVED
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UPPER JAW PLATE

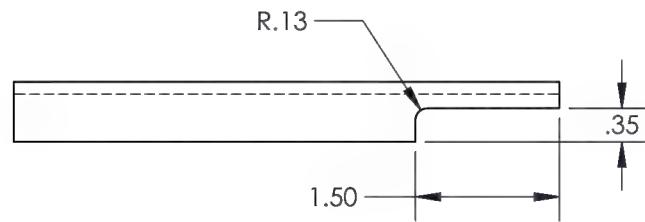
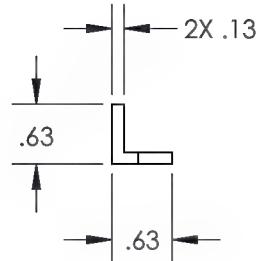
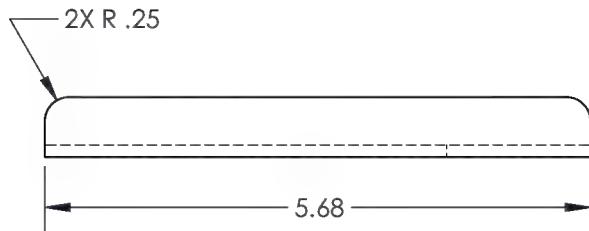
(-19)



DART AEROSPACE	
TITLE	
TOOL, M/R BLADE LIFTING	
DWG NO.	RBW6205G00632-3G-19
REV	6
UNLESS OTHERWISE SPECIFIED	
DIMENSIONS ARE IN INCHES	
HEAT	.XXX ± .010 FRACTIONS ± 1/8
TREAT	.XX ± .03 ANGLES ± 1°
FINISH SEE -15 WELDMENT	
SPEC	X ± .1 SURFACES = 125 ✓
DRAWN BY:	GILBERT
CHECKED:	CLOUGH
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT
USED ON MODEL AW139	
SCALE	1:6
DATE	2/21/2013
SHEET 13 OF 47	

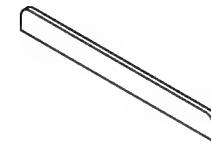
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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
3	15-0017	-21 CH'D MATERIAL WAS 6061 IS 6063.	1/20/2015	RJC	JAG
4	15-0337	-21 CH'D TO SHEET METAL TOLERANCE.	10/26/2015	RJC	JAG



(-21)

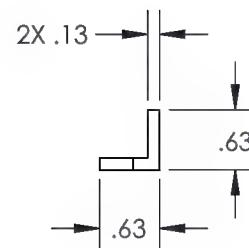
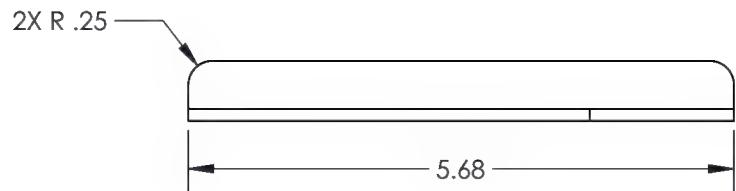
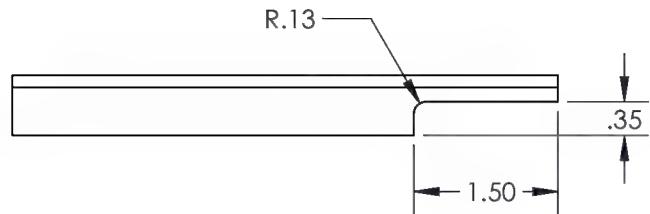
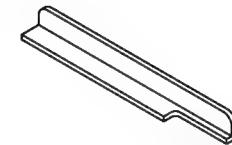
ANGLE BRACE



DART AEROSPACE	
TITLE	
TOOL, M/R BLADE LIFTING	
DWG NO. RBW6205G00632-3G-21	
REV 6	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
.XXX ± .010 FRACTIONS ± 1/8	
.XX ± .03 ANGLES ± 1°	
X ± .1 SURFACES = 125 ✓	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
DRAWN BY: GILBERT	
CHECKED: CLOUGH	
OPPS APPR: ANDERSON	
QA APPR: LINDSAY	
APPROVED: GILBERT AW139	
SCALE	1:2
DATE	2/21/2013
SHEET 14 OF 47	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
3	15-0017	-23 CH'D MATERIAL WAS 6061 IS 6063.	1/20/2015	RJC	JAG
4	15-0337	-23 CH'D TO SHEET METAL TOLERANCE.	10/26/2015	RJC	JAG



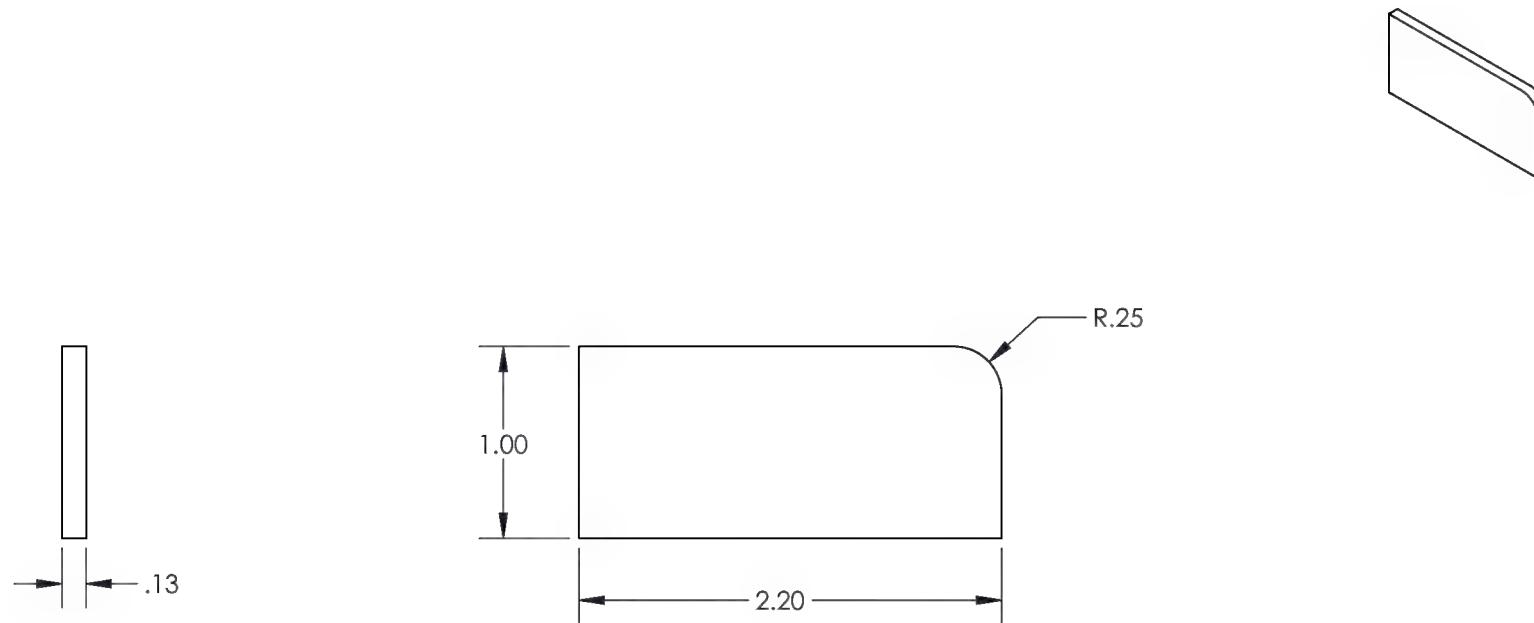
(-23)

ANGLE BRACE 2

DART AEROSPACE	
TITLE	
TOOL, M/R BLADE LIFTING	
DWG NO. RBW6205G00632-3G-23	
REV 6	
MAT'L 6063 UNLESS OTHERWISE SPECIFIED	
HEAT DIMENSIONS ARE IN INCHES	
TREAT .XXX ± .010 FRACTIONS ± 1/8	
FINISH SEE -15 WELDMENT .XX ± .03 ANGLES ± 1°	
SPEC X ± .1 SURFACES = 125 ✓	
DRAWN BY: GILBERT	
CHECKED: CLOUGH	
OPPS APPR: ANDERSON	
QA APPR: LINDSAY USED ON MODEL	
APPROVED: GILBERT AW139	
SCALE	1:2
DATE	2/26/2013
SHEET 15 OF 47	

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REVISIONS					
REV	ECR		DESCRIPTION	DATE	INITIAL
4	15-0337	-25	CH'D TO SHEET METAL TOLERANCE.	10/26/2015	RJC JAG



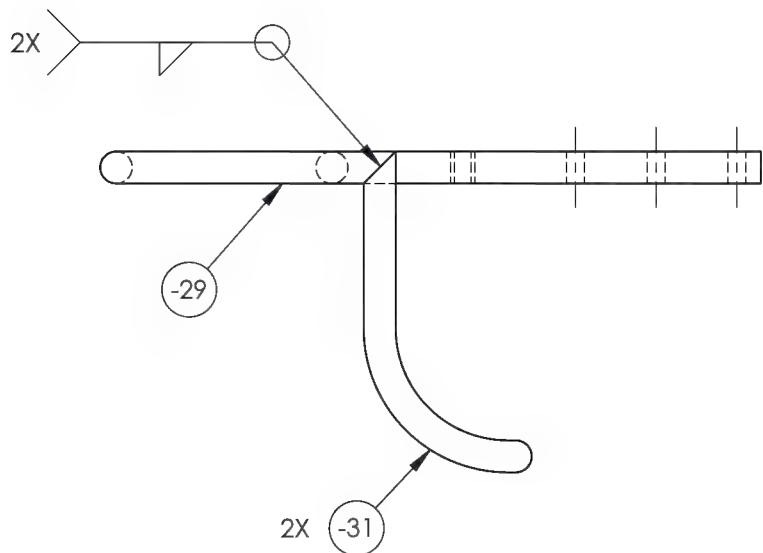
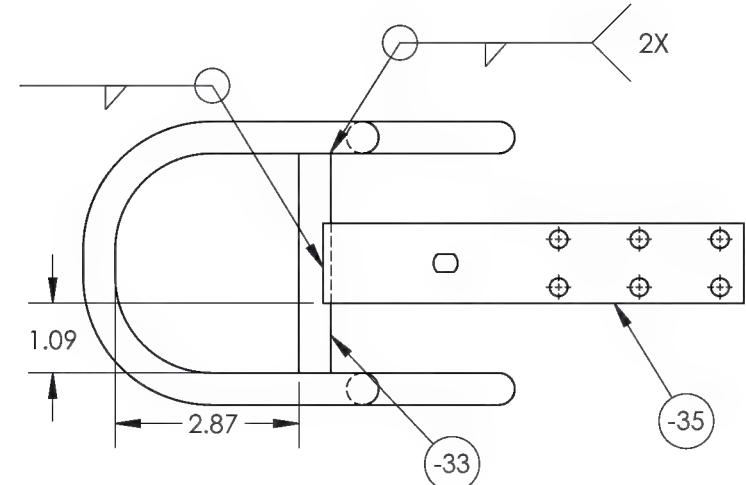
(-25)

UPPER JAW BRACE, SHORT

DART AEROSPACE	
TITLE	
TOOL, M/R BLADE LIFTING	
DWG NO. RBW6205G00632-3G-25	
REV 6	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
.XXX ± .010 FRACTIONS ± 1/8	
.XX ± .03 ANGLES ± 1°	
X ± .1 SURFACES = 125 ✓	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
DRAWN BY: GILBERT	
CHECKED: CLOUGH	
OPPS APPR: ANDERSON	
QA APPR: LINDSAY	
APPROVED: GILBERT	
USED ON MODEL AW139	
SCALE	1:1
DATE	2/21/2013
SHEET 16 OF 47	

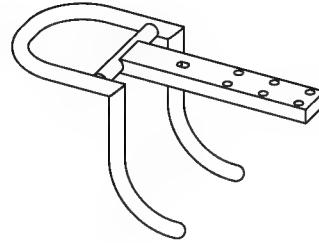
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REVIEWS			DESCRIPTION			DATE	INITIAL	APPROVED
REV	ECR							
5	16-0164	-27	REMOVED FINISH SPEC.			10/12/2016	SM	JAG



HANDLE WELDMENT

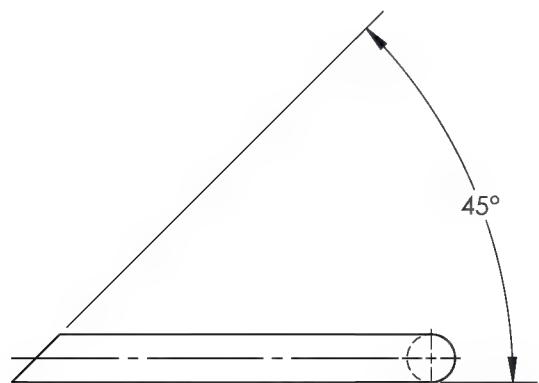
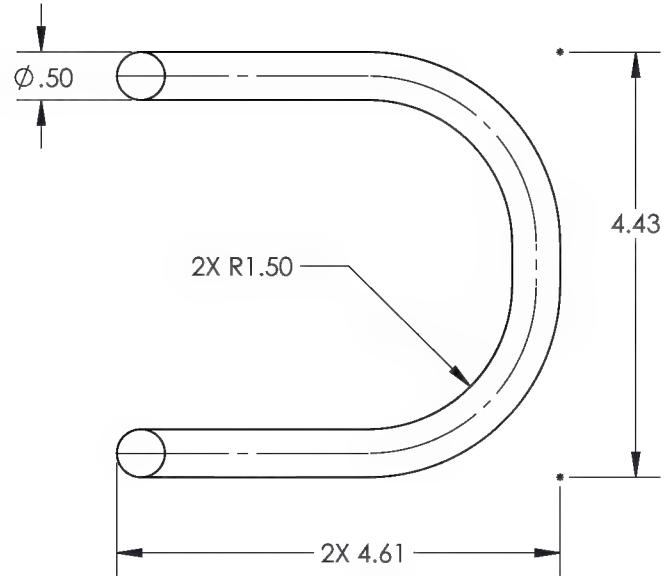
-27



DART AEROSPACE	
TITLE	
TOOL, M/R BLADE LIFTING	
DWG NO. RBW6205G00632-3G-27	
REV 6	
MAT'L UNLESS OTHERWISE SPECIFIED HEAT DIMENSIONS ARE IN INCHES TREAT .XXX ± .010 FRACTIONS ± 1/8 FINISH POWDER COAT RED .XX ± .03 ANGLES ± 1° SPEC .X ± .1 SURFACES = 125 ✓ 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
DRAWN BY:	CLOUGH
CHECKED:	CLOUGH
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT
USED ON MODEL AW 139	
SCALE	1:3
DATE	2/12/2013
SHEET 17 OF 47	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
4	15-0337	-29 CH'D TO SHEET METAL TOLERANCE.	10/26/2015	RJC	JAG
5	16-0164	-29 CH'D DIM WAS R1.00 IS R1.50.	10/12/2016	SM	JAG
6	17-0031	-29 CH'D DIM WAS R1.50 IS 2X R1.50.	1/24/2017	SM	JAG



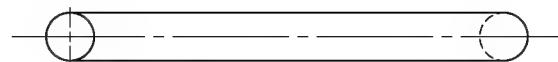
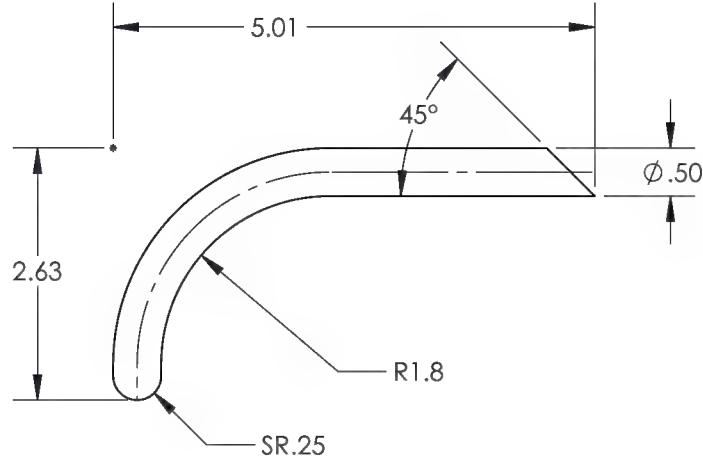
(29)

HANDLE

DART AEROSPACE	
TITLE	
TOOL, M/R BLADE LIFTING	
DWG NO. RBW6205G00632-3G-29	
REV 6	
MATERIAL 6063 UNLESS OTHERWISE SPECIFIED	
HEAT DIMENSIONS ARE IN INCHES	
TREAT FRACTIONS $\pm \frac{1}{16}$	
FINISH SEE -27 WELDMENT ANGLES $\pm 1^\circ$	
SPEC SURFACES = 125	
SPEC	
DRAWN BY: CLOUGH	
CHECKED: CLOUGH	
OPPS APPR: ANDERSON	
QA APPR: LINDSAY	
APPROVED: GILBERT	
SCALE 1:2	USED ON MODEL
DATE 2/12/2013	SHEET 18 OF 47

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REVISIONS					
REV	ECR		DESCRIPTION	DATE	INITIAL
4	15-0337	-31	CH'D TO SHEET METAL TOLERANCE.	10/26/2015	RJC
6	17-0031	-31	CH'D DIM WAS R.25 IS SR.25.	1/24/2017	JAG



HANDLE ARM

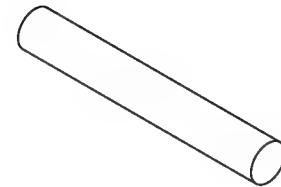
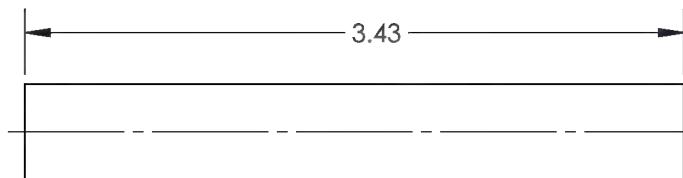
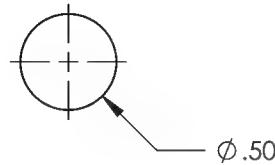
(-31)



DART AEROSPACE	
TITLE	
TOOL, M/R BLADE LIFTING	
DWG NO.	RBW6205G00632-3G-31
REV	6
MAT'L 6063 UNLESS OTHERWISE SPECIFIED	
HEAT DIMENSIONS ARE IN INCHES	
TREAT .XXX ± .010 FRACTIONS ± 1/8	
FINISH SEE -27 WELDMENT .XX ± .03 ANGLES ± 1°	
SPEC .X ± .1 SURFACES = 125 ✓	
DRAWN BY:	CLOUGH
CHECKED:	CLOUGH
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT
USED ON MODEL AW 139	
SCALE	1:2
DATE	2/12/2013
SHEET 19 OF 47	

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REVISIONS					
REV	ECR		DESCRIPTION	DATE	INITIAL
4	15-0337	-33	CH'D TO SHEET METAL TOLERANCE.	10/26/2015	RJC JAG



(-33)

HANDLE BRACE

DART AEROSPACE	
TITLE	
TOOL, M/R BLADE LIFTING	
DWG NO. RBW6205G00632-3G-33 REV 6	
MAT'L 6063 UNLESS OTHERWISE SPECIFIED	
HEAT DIMENSIONS ARE IN INCHES	
TREAT FRACTIONS $\pm \frac{1}{16}$	
FINISH SEE -27 WELDMENT ANGLES $\pm 1^\circ$	
SPEC SURFACES = 125	
DRAWN BY: CLOUGH	
CHECKED: CLOUGH	
OPPS APPR: ANDERSON	
QA APPR: LINDSAY USED ON MODEL	
APPROVED: GILBERT AW139	
SCALE 1:1	DATE 2/12/2013
SHEET 20 OF 47	

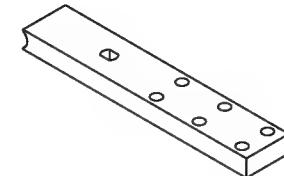
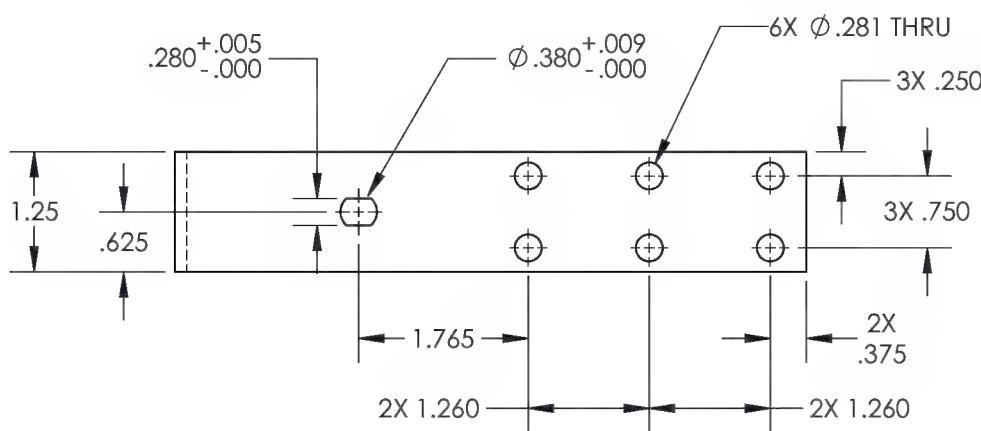
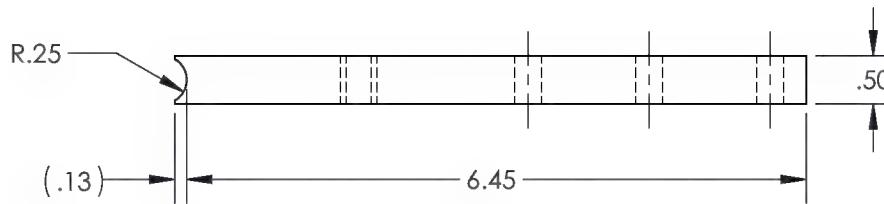
1. BREAK ALL SHARP EDGES
.015 x 45° OR .015R

2. DIMENSIONAL LIMITS APPLY
AFTER PLATING

3. INTERPRET DIM AND TOL PER
ASME Y14.5M-2009

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REV		ECR		DESCRIPTION		DATE	INITIAL	APPROVED
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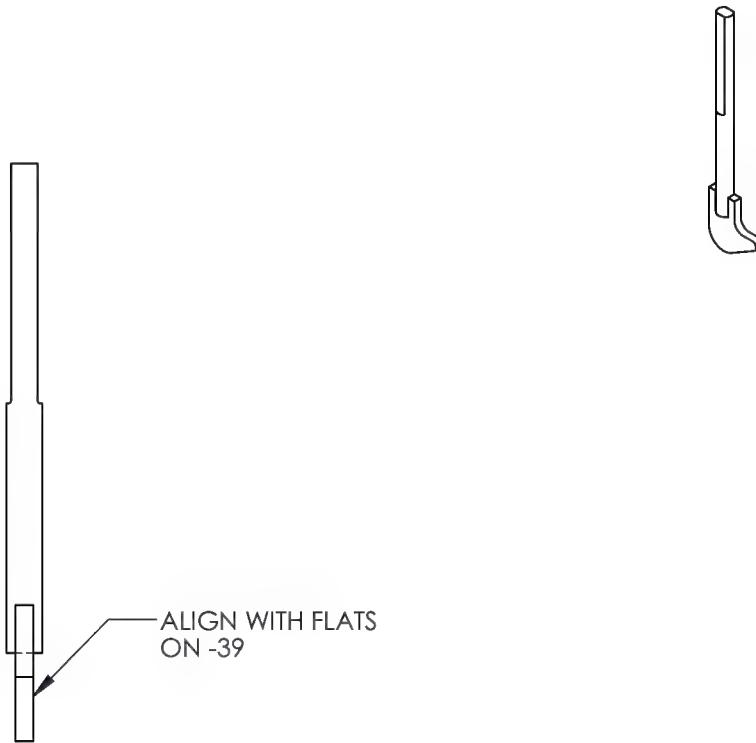
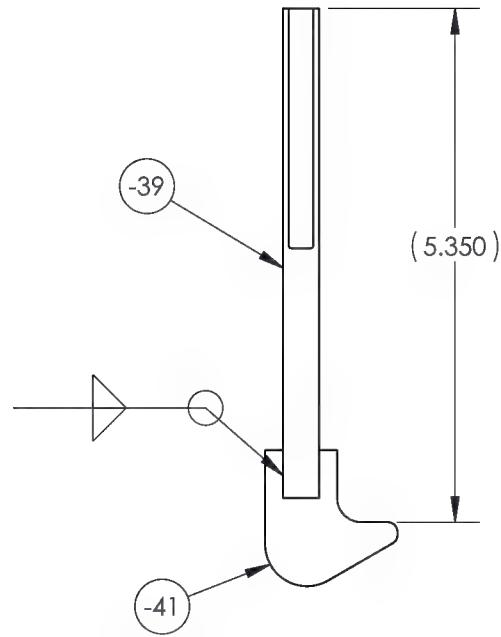
LATCH BLOCK

-35

DART AEROSPACE	
TITLE	
TOOL, M/R BLADE LIFTING	
DWG NO. RBW6205G00632-3G-35	
REV 6	
MATERIAL 6061 UNLESS OTHERWISE SPECIFIED HEAT DIMENSIONS ARE IN INCHES TREAT FRACTIONS $\pm \frac{1}{16}$ FINISH SEE -27 WELDMENT ANGLES $\pm 5^\circ$ SPEC SURFACES = 125	
.000 $\pm .005$.01 $\pm .01$ X $\pm .1$	
DRAWN BY: GILBERT CHECKED: CLOUGH OPPS APPR: ANDERSON QA APPR: LINDSAY APPROVED: GILBERT	
USED ON MODEL AW139	
SCALE 1:2	DATE 2/21/2013
SHEET 21 OF 47	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
4	15-0337	-37 CH'D TO SHEET METAL TOLERANCE.	10/26/2015	RJC	JAG



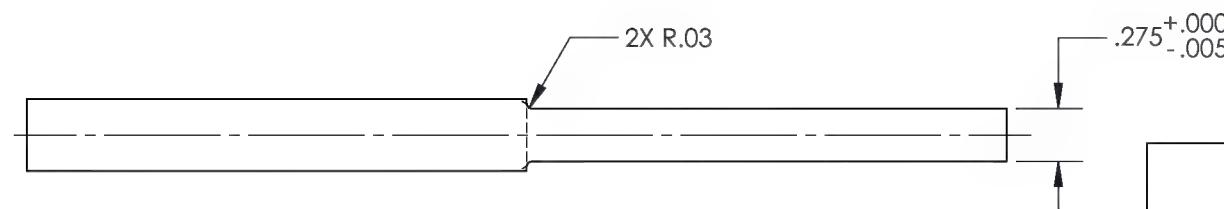
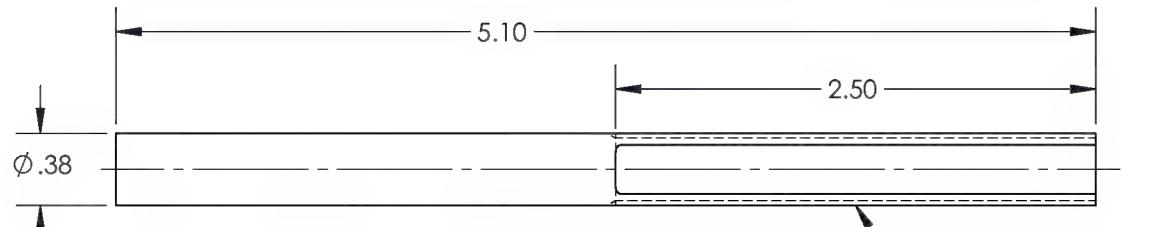
HOOK WELDMENT

(-37)

DART AEROSPACE	
TITLE	
TOOL, M/R BLADE LIFTING	
DWG NO. RBW6205G00632-3G-37 REV 6	
MATERIAL	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
HEAT	.XXX ± .010 FRACTIONS ± 1/8
TREAT	.XX ± .03 ANGLES ± 1°
FINISH	X ± .1 SURFACES = 125 ✓
SPEC	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	
DRAWN BY: GILBERT	
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
CHECKED: CLOUGH	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
OPPS APPR: ANDERSON	USED ON MODEL
QA APPR: LINDSAY	AW139
APPROVED: GILBERT	
SCALE 1:2	DATE 2/26/2013
SHEET 22 OF 47	

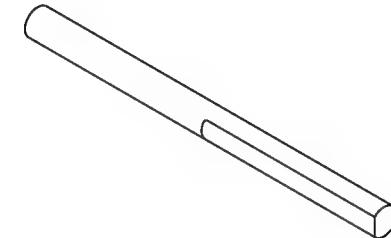
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REVISIONS						
REV	ECR	DESCRIPTION			DATE	INITIAL
1		-39 CH'D THREAD WAS 3/8-24 IS 3/8-16.			7/1/2013	CFS
3	15-0017	-39 ADDED MISSING DIMENSION 2X R.03.			1/20/2014	RJC
4	15-0337	-39 CH'D TO SHEET METAL TOLERANCE.			10/26/2015	RJC



-39

ROD



DART AEROSPACE	
TITLE	
TOOL, M/R BLADE LIFTING	
DWG NO. RBW6205G00632-3G-39 REV 6	
MATERIAL 304 S.S. UNLESS OTHERWISE SPECIFIED HEAT DIMENSIONS ARE IN INCHES TREAT FRACTIONS $\pm \frac{1}{16}$ FINISH ANGLES $\pm 1^\circ$ SPEC SURFACES = 125	
.XXX $\pm .010$.XX $\pm .03$.X $\pm .1$	
DRAWN BY: GILBERT CHECKED: CLOUGH OPPS APPR: ANDERSON QA APPR: LINDSAY APPROVED: GILBERT AW139	
SCALE 1:1	DATE 2/26/2013
SHEET 23 OF 47	

USED ON MODEL

ASME Y14.5M-2009

INTERPRET DIM AND TOL PER

AFTER PLATING

1. BREAK ALL SHARP EDGES

.015 x 45° OR .015R

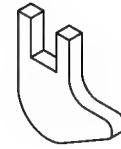
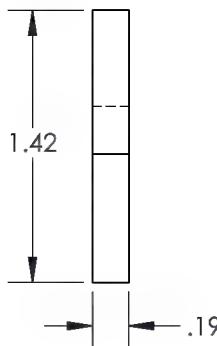
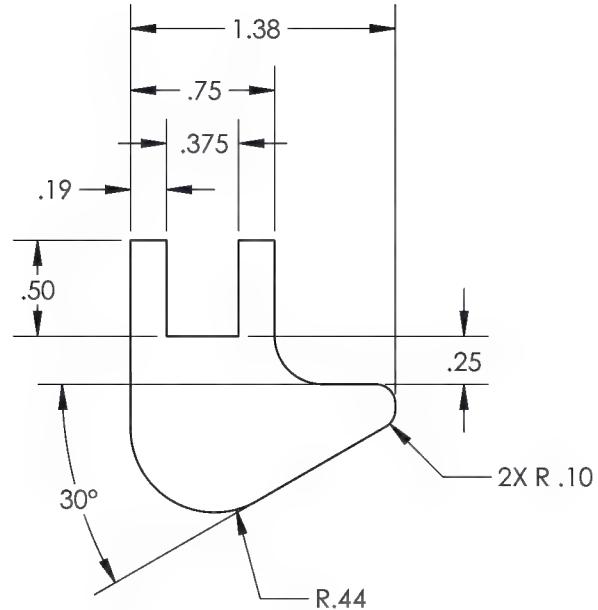
2. DIMENSIONAL LIMITS APPLY

3. INTERPRET DIM AND TOL PER

ASME Y14.5M-2009

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REV			ECR			DESCRIPTION			REVISIONS		
4	15-0337	-41 CH'D TO SHEET METAL TOLERANCE.							DATE	INITIAL	APPROVED
									10/26/2015	RJC	JAG



(-41)

HOOK

DART AEROSPACE	
TITLE	
TOOL, M/R BLADE LIFTING	
DWG NO. RBW6205G00632-3G-41 REV 6	
MATERIAL 304 S.S. UNLESS OTHERWISE SPECIFIED HEAT DIMENSIONS ARE IN INCHES TREAT FRACTIONS $\pm \frac{1}{16}$ FINISH ANGLES $\pm 1^\circ$ SPEC SURFACES = 125	
.XXX $\pm .010$.XX $\pm .03$ X $\pm .1$	
DRAWN BY: GILBERT CHECKED: CLOUGH OPPS APPR: ANDERSON QA APPR: LINDSAY APPROVED: GILBERT	
USED ON MODEL AW139	
SCALE 1:1	DATE 2/26/2013
SHEET 24 OF 47	

DART
AEROSPACE

TOOL, M/R BLADE LIFTING

DWG NO. RBW6205G00632-3G-41 REV 6

MATERIAL 304 S.S. UNLESS OTHERWISE SPECIFIED
HEAT DIMENSIONS ARE IN INCHES
TREAT FRACTIONS $\pm \frac{1}{16}$
FINISH ANGLES $\pm 1^\circ$
SPEC SURFACES = 125

.XXX $\pm .010$
.XX $\pm .03$
X $\pm .1$

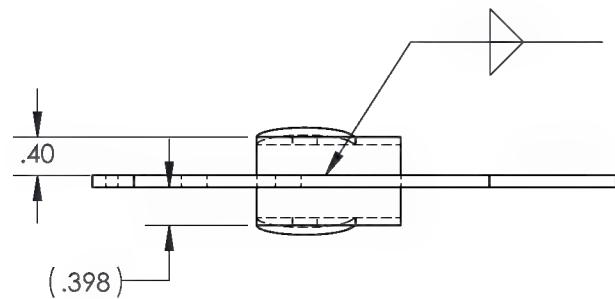
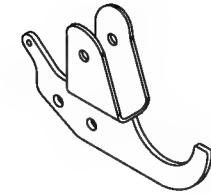
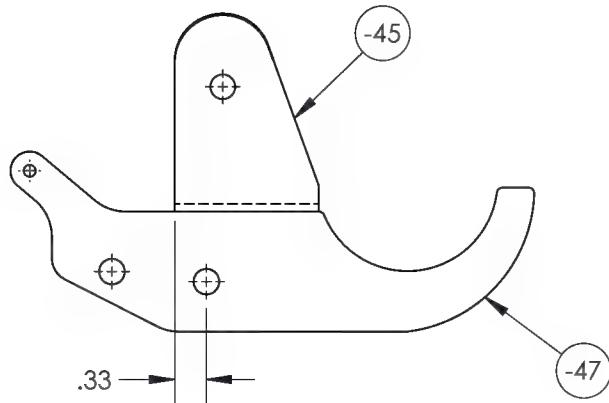
DRAWN BY: GILBERT
CHECKED: CLOUGH
OPPS APPR: ANDERSON
QA APPR: LINDSAY
APPROVED: GILBERT

USED ON MODEL
AW139

SCALE 1:1 DATE 2/26/2013 SHEET 24 OF 47

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REVISIONS					
REV	ECR		DESCRIPTION	DATE	INITIAL
4	15-0337	-43	CH'D TO SHEET METAL TOLERANCE.	10/26/2015	RJC JAG
5	16-0164	-43	REMOVED FINISH SPEC.	10/12/2016	SM JAG

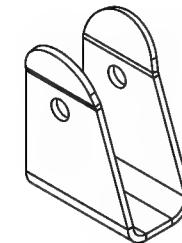
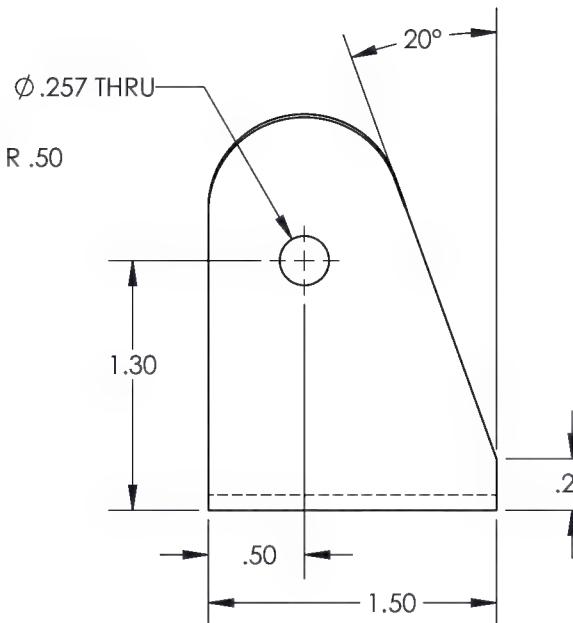
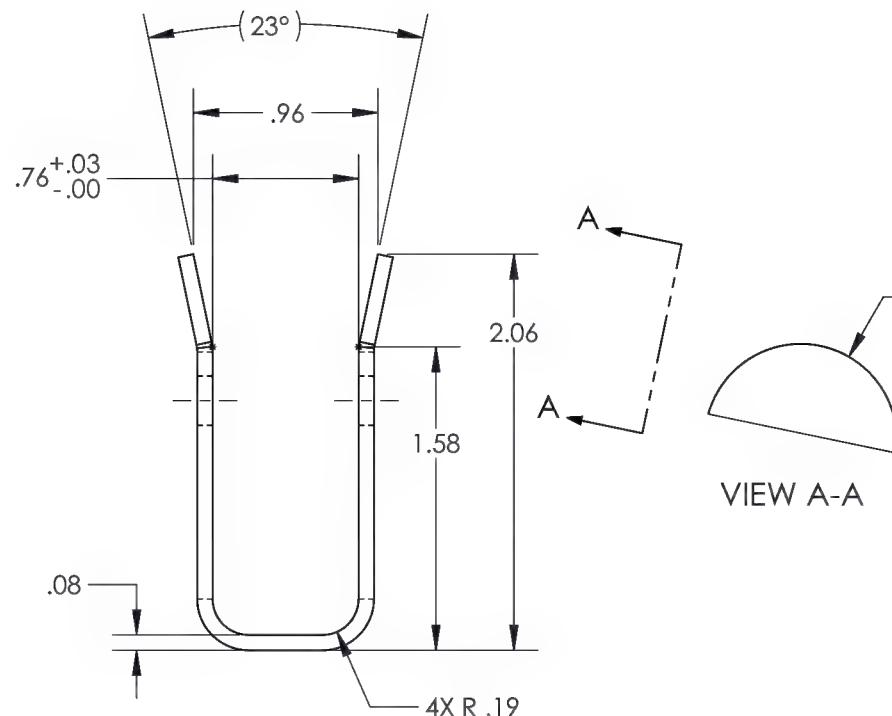


LATCH WELDMENT

DART AEROSPACE	
TITLE	
TOOL, M/R BLADE LIFTING	
DWG NO.	RBW6205G00632-3G-43
REV	6
MATERIAL	
HEAT TREAT	
FINISH POWDER COAT RED	
SPEC	
DRAWN BY:	CLOUGH
CHECKED:	CLOUGH
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
.XXX ± .010 FRACTIONS ± 1/8	
.XX ± .03 ANGLES ± 1°	
X ± .1 SURFACES = 125 ✓	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
USED ON MODEL	
AW139	
SCALE	1:2
DATE	2/12/2013
SHEET 25 OF 47	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		-45 ADDED TOLERANCE WAS .76 IS .76 +.03-.00.	7/10/2013	RJC	JAG
2		-45 ADDED AUX VIEW A-A & MISSING DIMS 2X R.50, 20°.	4/24/2014	DPD	RJC



(-45)

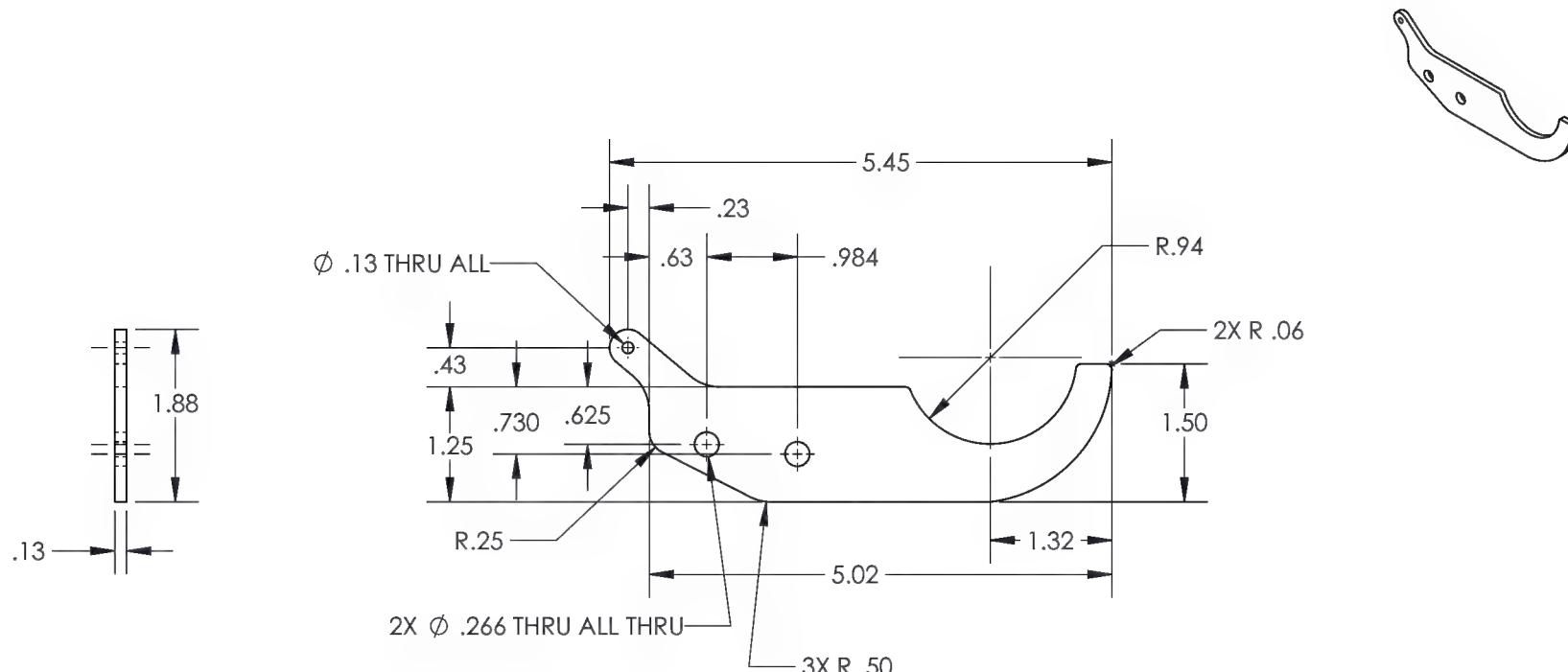
LATCH CATCH

TITLE		DART AEROSPACE
DWG NO.		RBW6205G00632-3G-45
MAT'L		5052
HEAT		UNLESS OTHERWISE SPECIFIED
TREAT		DIMENSIONS ARE IN INCHES
FINISH SEE -43 WELDMENT		.XXX ± .010 FRACTIONS ± 1/8
SPEC		.XX ± .03 ANGLES ± 1°
DRAWN BY:		X ± .1 SURFACES = 125 ✓
CHECKED:		.015 x 45° OR .015R
OPPS APPR:		1. BREAK ALL SHARP EDGES
QA APPR:		2. DIMENSIONAL LIMITS APPLY
APPROVED:		AFTER PLATING
		3. INTERPRET DIM AND TOL PER
		ASME Y14.5M-2009
SCALE	1:1	USED ON MODEL
DATE	2/12/2013	AW 139
SHEET	26 OF 47	

6

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REV			ECR			DESCRIPTION			REVISIONS		
4	15-0337	-47 CH'D TO SHEET METAL TOLERANCE.							DATE	INITIAL	APPROVED



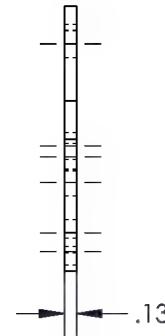
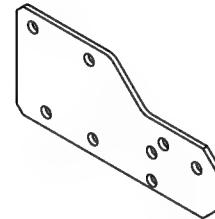
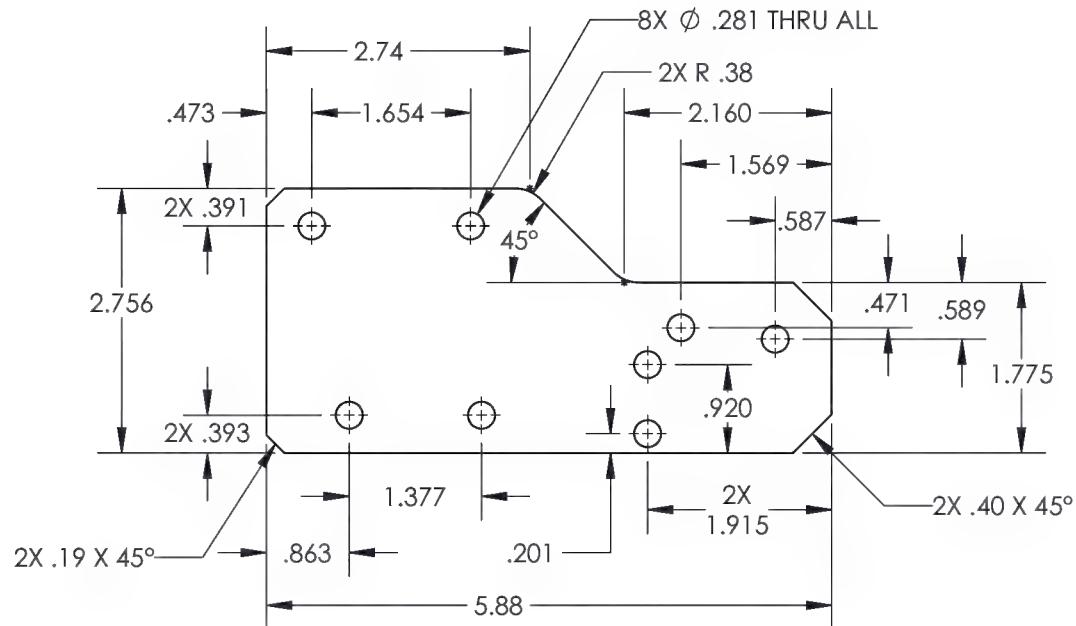
-47

LATCH HOOK

DART AEROSPACE	
TITLE	
TOOL, M/R BLADE LIFTING	
DWG NO. RBW6205G00632-3G-47 REV 6	
MATERIAL 6061 UNLESS OTHERWISE SPECIFIED	
HEAT FRACTIONS $\pm \frac{1}{8}$	
TREAT .XXX $\pm .010$	
FINISH SEE -43 WELDMENT .XX $\pm .03$ ANGLES $\pm 1^\circ$	
SPEC .X $\pm .1$ SURFACES = 125 ✓	
DRAWN BY: CLOUGH	
CHECKED: CLOUGH	
OPPS APPR: ANDERSON	
QA APPR: LINDSAY	
APPROVED: GILBERT	
USED ON MODEL AW 139	
SCALE 1:2	DATE 2/12/2013
SHEET 27 OF 47	

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			REVISIONS			
REV	ECR		DESCRIPTION	DATE	INITIAL	APPROVED
4	15-0337		-49 CH'D TO SHEET METAL TOLERANCE.	10/26/2015	RJC	JAG
5	16-0164		-49 REMOVED FINISH SPEC.	10/12/2016	SM	JAG



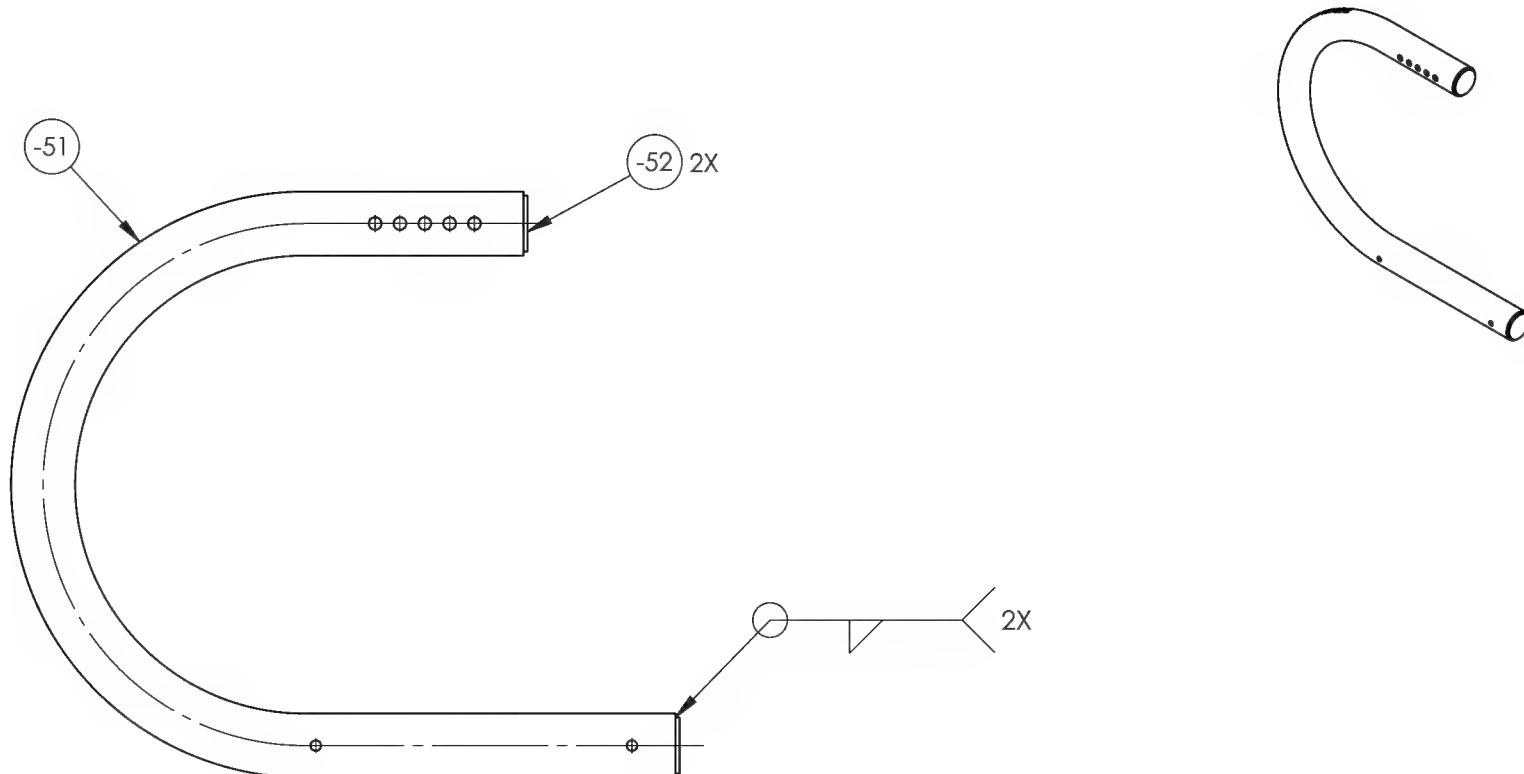
LATCH BRACKET

(-49)

	
TITLE	
TOOL, M/R BLADE LIFTING	
DWG NO.	RBW6205G00632-3G-49
REV	6
MATERIAL 6061 UNLESS OTHERWISE SPECIFIED HEAT FRACTIONS $\pm \frac{1}{16}$ TREAT ANGLES $\pm 1^\circ$ FINISH POWDER COAT RED SURFACES = 125	
SPEC DRAWN BY: GILBERT CHECKED: CLOUGH OPPS APPR: ANDERSON QA APPR: LINDSAY APPROVED: GILBERT AW139	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009 USED ON MODEL	
SCALE	1:2
DATE	2/26/2013
SHEET 28 OF 47	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2		-50 ADDED WELDMENT.	4/28/2014	DPD	GE
5	16-0164	-50 REMOVED FINISH SPEC, CH'D SHEET TOL WAS $\pm .005/\pm .01/\pm .1$ IS $\pm .010/\pm .03/\pm .1$.	10/12/2016	SM	JAG



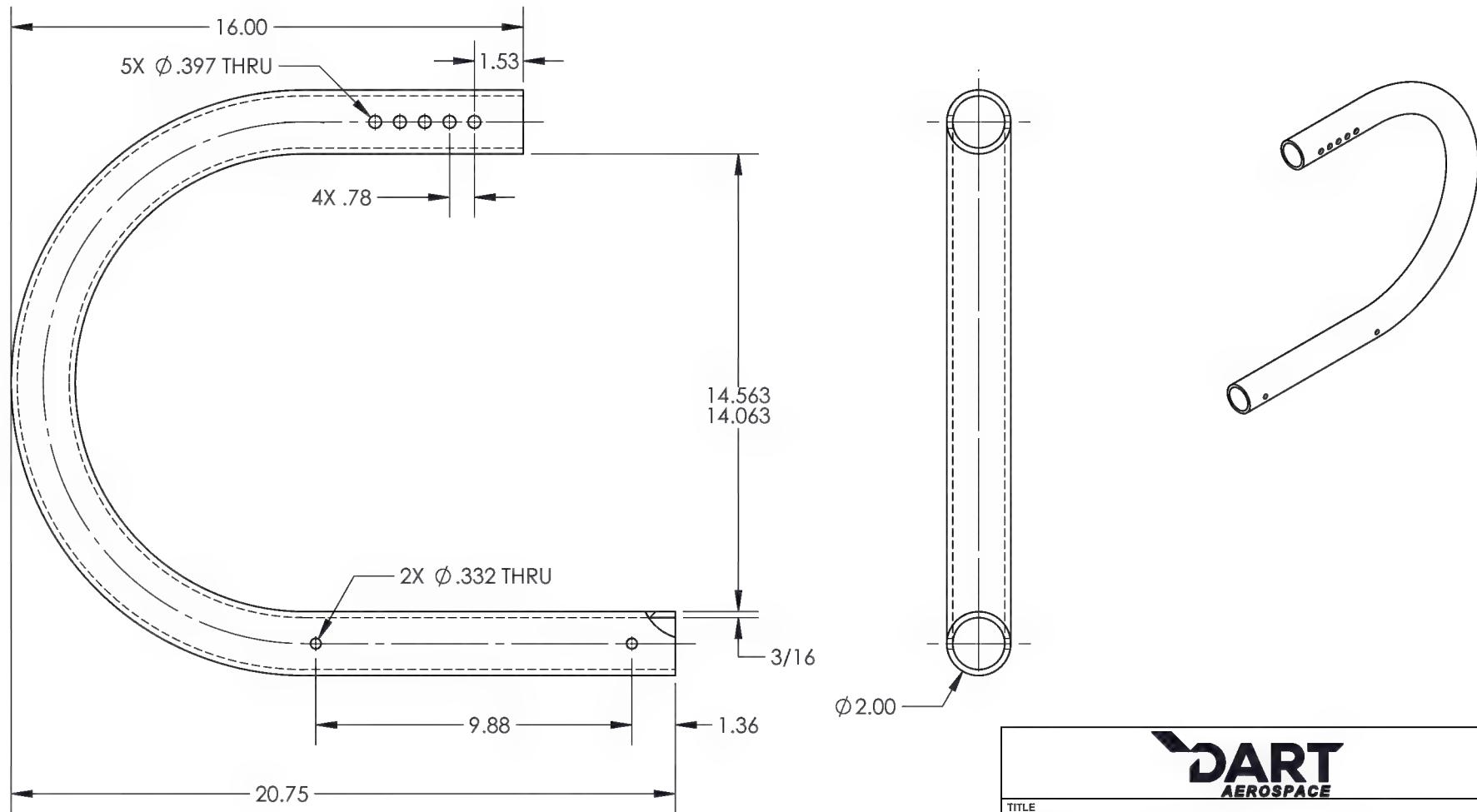
LIFT ARM WELDMENT

DART AEROSPACE	
TITLE	
TOOL, M/R BLADE LIFTING	
DWG NO. RBW6205G00632-3G-50 REV 6	
MAT'L UNLESS OTHERWISE SPECIFIED HEAT DIMENSIONS ARE IN INCHES TREAT FRACTIONS $\pm 1/8$ FINISH POWDER COAT RED ANGLES $\pm 1^\circ$ SPEC SURFACES = 125	
.XXX $\pm .010$.XX $\pm .03$.X $\pm .1$	
DRAWN BY:	GILBERT
CHECKED:	CLOUGH
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT
USED ON MODEL AW139	
SCALE	1:6
DATE	2/21/2013
SHEET 29 OF 47	

1. BREAK ALL SHARP EDGES
.015 x 45° OR .015R
2. DIMENSIONAL LIMITS APPLY AFTER PLATING
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
4	15-0337	-51 CH'D DIMS WAS 4X .775 ±.010 IS 4X .775 ±.06, WAS 9.875 IS 9.875 ±.06, WAS 14.313 IS 14.313 ±.25. CH'D TO SHEET METAL TOLERANCE.	10/26/2015	RJC	JAG
6	17-0031	-51 CH'D DIM WAS 4X .775±.06 IS 4X .78, WAS 9.875±.06 IS 9.88, WAS 14.313±.25 IS 14.563/14.063.	1/24/2017	SM	JAG



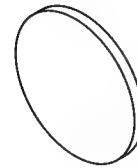
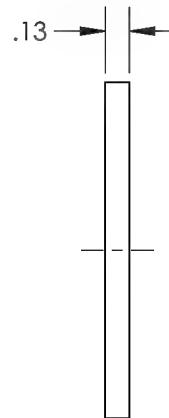
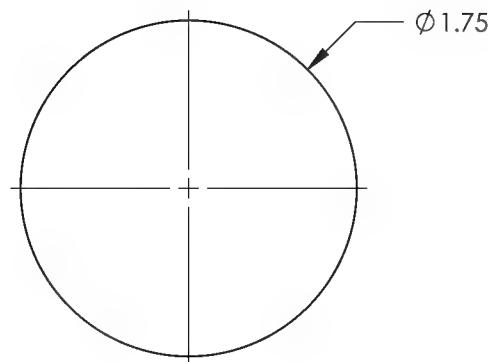
DART AEROSPACE	
TITLE	
TOOL, M/R BLADE LIFTING	
DWG NO.	RBW6205G00632-3G-51
REV	6
MATERIAL 6061 UNLESS OTHERWISE SPECIFIED HEAT FRACTIONS ± 1/8 TREAT ANGLES ± 1° FINISH SEE -50 WELDMENT SURFACES = 125 ✓	
SPEC .XXX ± .010 .XX ± .03 X ± .1	
DRAWN BY:	CLOUGH
CHECKED:	CLOUGH
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT
USED ON MODEL AW139	
SCALE	1:5
DATE	6/18/2012
SHEET 30 OF 47	

(-51)

LIFT ARM

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2		-52 ADDED PART TO REPLACE -119.	4/28/20104	DPD	GE
4	15-0337	-52 CH'D TO SHEET METAL TOLERANCE.	10/26/2015	RJC	JAG

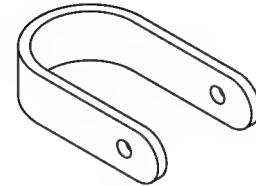
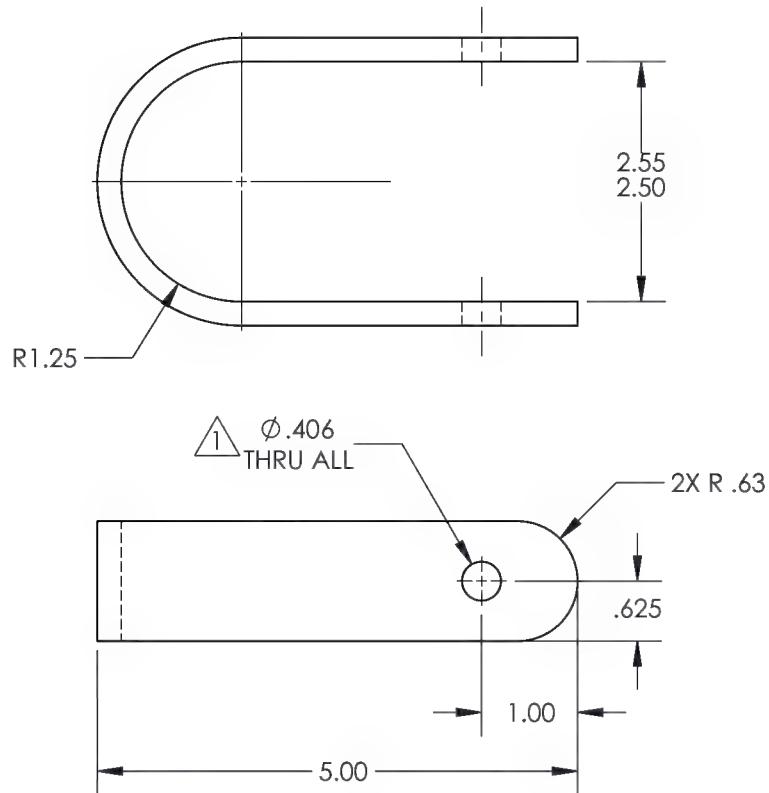


-52
LIFT ARM END CAP

DART AEROSPACE	
TITLE	
TOOL, M/R BLADE LIFTING	
DWG NO. RBW6205G00632-3G-52 REV 6	
MAT'L 6061 UNLESS OTHERWISE SPECIFIED	
HEAT DIMENSIONS ARE IN INCHES	
TREAT FRACTIONS $\pm \frac{1}{8}$	
FINISH SEE -50 WELDMENT .XX $\pm .03$ ANGLES $\pm 1^\circ$	
SPEC .X $\pm .1$ SURFACES = 125 ✓	
DRAWN BY: GILBERT	
CHECKED: CLOUGH	
OPPS APPR: ANDERSON	
QA APPR: LINDSAY USED ON MODEL	
APPROVED: GILBERT AW139	
SCALE	1:1
DATE	2/21/2013
SHEET 31 OF 47	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		-53 CH'D WIDTH TOLERANCE WAS 2.500 +.010 -.000 IS 2.500 +.05 -.00, CH'D HIEGHT WAS 1.375 IS 1.250, CH'D HOLE LOCATION WAS .688 IS .625, RADIUS WAS .69 IS .63, CH'D THICKNESS WAS .313 IS .25.	7/1/2013	CFS	JAG
4	15-0337	-53 CH'D TO SHEET METAL TOLERANCE.	10/26/2015	RJC	JAG
5	16-0164	-53 REMOVED FINISH SPEC.	10/12/2016	SM	JAG
6	17-0031	-53 CH'D DIM WAS 2.500+.05/-0.00 IS 2.55/2.50.	1/24/2017	SM	JAG



(-53)

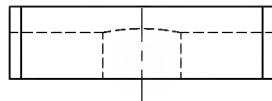
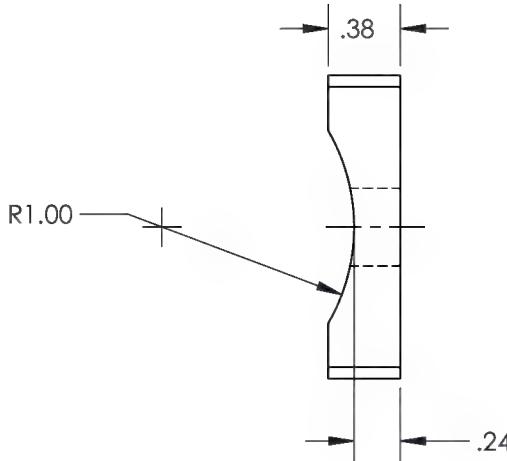
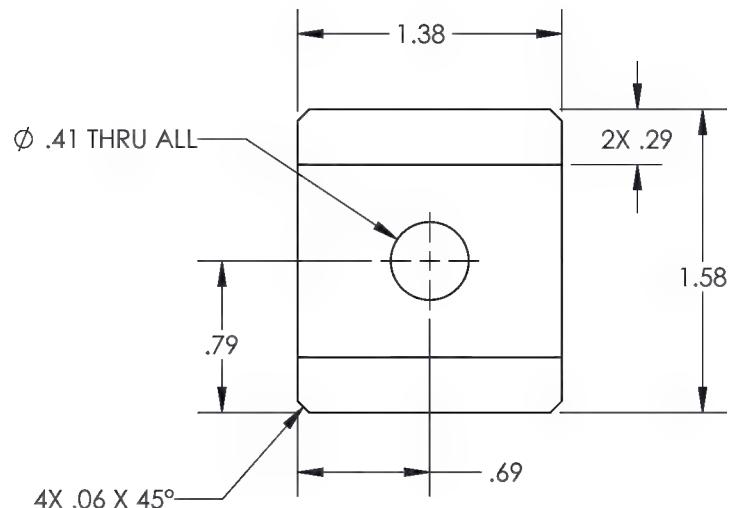
CLEVIS

NOTE:
⚠ HOLE TO BE DRILLED AFTER PART IS FORMED.

DART AEROSPACE	
TITLE	
TOOL, M/R BLADE LIFTING	
DWG NO.	RBW6205G00632-3G-53
REV	6
MATERIAL A-36 P & O	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
HEAT	.XXX ± .010 FRACTIONS ± 1/8
TREAT	.XX ± .03 ANGLES ± 1°
FINISH	X ± .1 SURFACES = 125 ✓
SPEC	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
DRAWN BY:	CLOUGH
CHECKED:	CLOUGH
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT
USED ON MODEL	AW139
SCALE	1:2
DATE	6/18/2012
SHEET 32 OF 47	

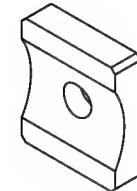
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REV			ECR			DESCRIPTION			REVISIONS		
5	16-0164		-55 REMOVED FINISH SPEC.						DATE	INITIAL	APPROVED
									10/12/2016	SM	JAG



(-55)

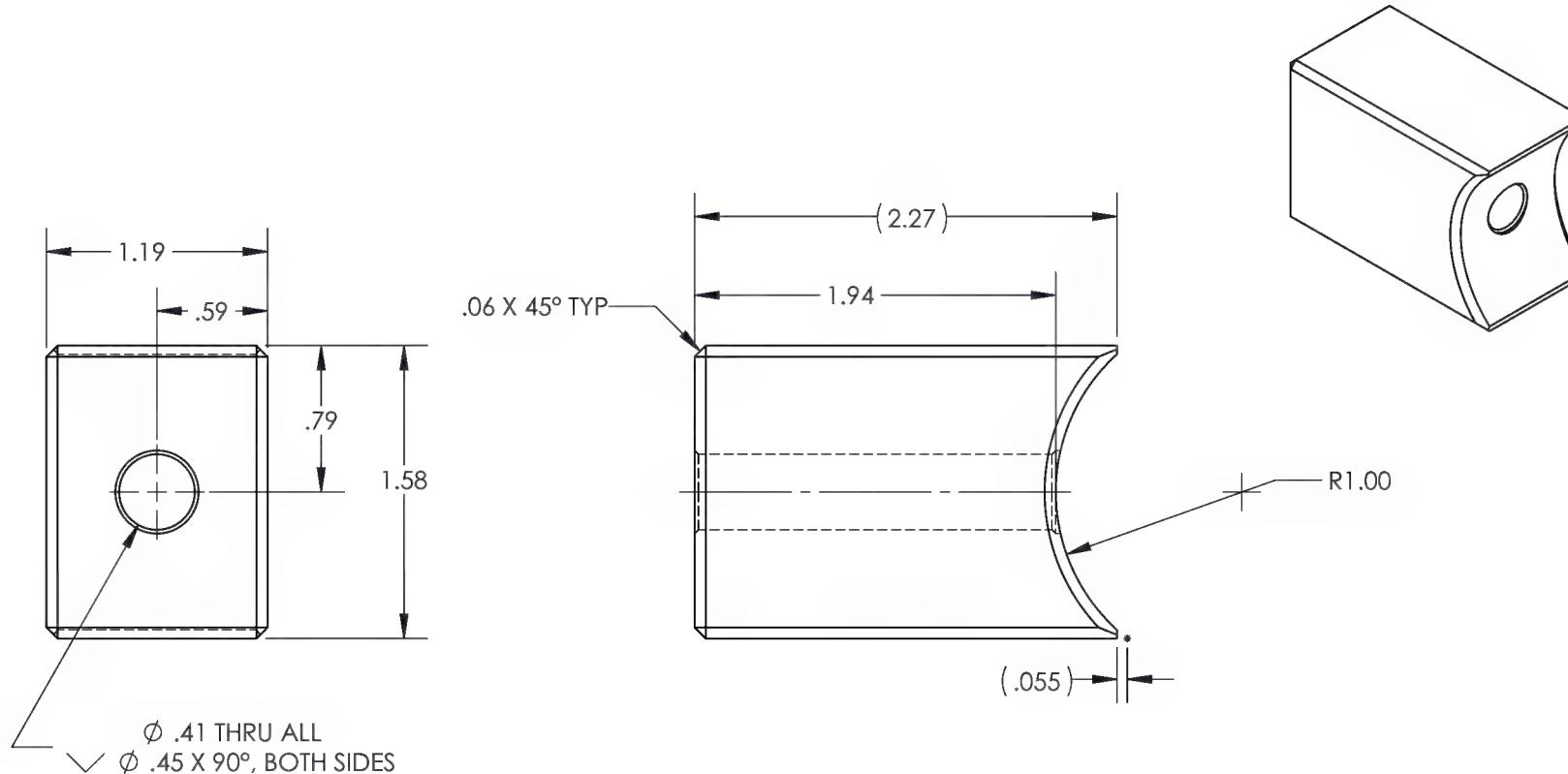
SPACER BLOCK



DART AEROSPACE	
TITLE	
TOOL,M/R BLADE LIFTING	
DWG NO. RBW6205G00632-3G-55 REV 6	
MAT'L 6061 UNLESS OTHERWISE SPECIFIED HEAT DIMENSIONS ARE IN INCHES TREAT FRACTIONS $\pm \frac{1}{8}$ FINISH POWDER COAT RED ANGLES $\pm 5^\circ$	
SPEC SURFACES = 125 DRAWN BY: CLOUGH CHECKED: CLOUGH OPPS APPR: ANDERSON QA APPR: LINDSAY APPROVED: GILBERT USED ON MODEL SCALE 1:1 DATE 2/12/2013 SHEET 33 OF 47	

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REVISIONS					
REV	ECR		DESCRIPTION	DATE	INITIAL
5	16-0164		-57 REMOVED FINISH SPEC.	10/12/2016	SM JAG
6	17-0031		-57 CH'D DIM WAS ϕ .41 THRU ALL ✓ ϕ .45X90°, NEAR SIDE ✓ ϕ .45X90°, FAR SIDE IS ϕ .41 THRU ALL ✓ ϕ .45X90°, BOTH SIDES; WAS 1.97 IS 1.94.	1/24/2017	SM JAG



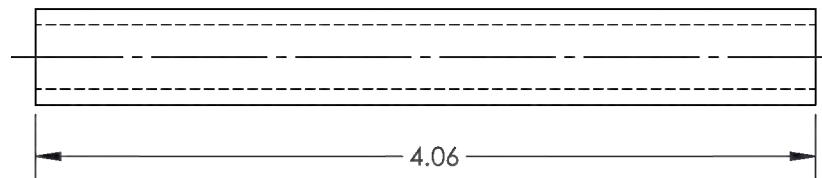
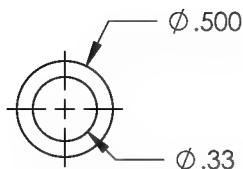
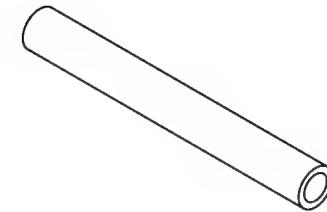
(-57)

HANDLE BLOCK

DART AEROSPACE	
TITLE	
TOOL, M/R BLADE LIFTING	
DWG NO. RBW6205G00632-3G-57 REV 6	
MAT'L 6061 UNLESS OTHERWISE SPECIFIED HEAT DIMENSIONS ARE IN INCHES TREAT FRACTIONS \pm 1/8 FINISH POWDER COAT RED ANGLES \pm 5° SPEC SURFACES = 125 ✓	
.XXX \pm .005 .XX \pm .01 X \pm .1	
SPECIFICATIONS	
DRAWN BY:	GILBERT
CHECKED:	CLOUGH
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT
USED ON MODEL AW139	
SCALE	1:1
DATE	2/21/2013
SHEET 34 OF 47	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
4	15-0337	-59 CH'D TO SHEET METAL TOLERANCE.	10/26/2015	RJC	JAG
6	17-0031	-59 CH'D DIM WAS Ø.50 IS Ø.500.	1/24/2017	SM	JAG



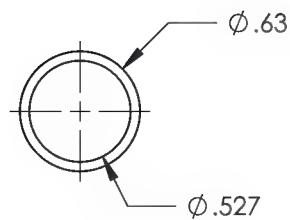
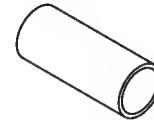
(-59)

HINGE SPACER

DART AEROSPACE	
TITLE	
TOOL, M/R BLADE LIFTING	
DWG NO. RBW6205G00632-3G-59	
REV 6	
MATERIAL 6061 UNLESS OTHERWISE SPECIFIED HEAT DIMENSIONS ARE IN INCHES TREAT FRACTIONS ± 1/8 FINISH CLEAR ANODIZE ANGLES ± 1° SPEC MIL-A-8625F, TYPE II, CLASS I SURFACES = 125 ✓ DRAWN BY: GILBERT CHECKED: CLOUGH OPPS APPR: ANDERSON QA APPR: LINDSAY USED ON MODEL APPROVED: GILBERT AW139 SCALE 1:1 DATE 2/26/2013 SHEET 35 OF 47	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
4	15-0337	-61 CH'D TO SHEET METAL TOLERANCE.	10/26/2015	RJC	JAG
6	17-0031	-61 CH'D DIM WAS Ø.53 IS Ø.527.	1/24/2017	SM	JAG



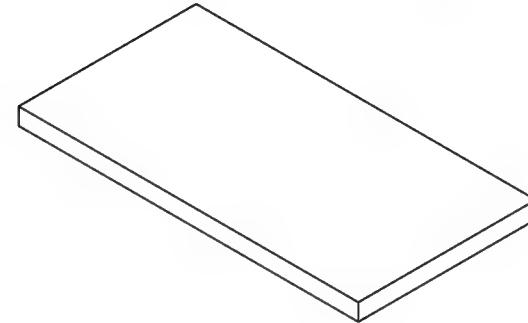
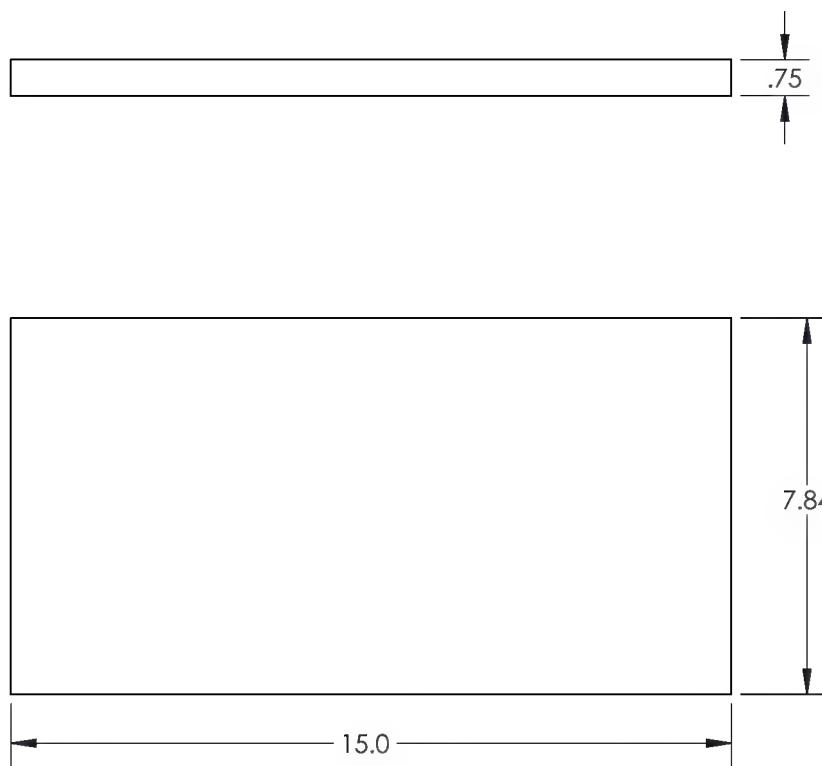
-61

SHORT HINGE SPACER

DART AEROSPACE	
TITLE	
TOOL, M/R BLADE LIFTING	
DWG NO. RBW6205G00632-3G-61 REV 6	
MAT'L 6061 UNLESS OTHERWISE SPECIFIED	
HEAT DIMENSIONS ARE IN INCHES	
TREAT .XXX ± .010 FRACTIONS ± 1/8	
FINISH CLEAR ANODIZE .XX ± .03 ANGLES ± 1°	
SPEC MIL-A-8625, TYPE II, CLASS I .X ± .1 SURFACES = 125 ✓	
DRAWN BY:	GILBERT
CHECKED:	CLOUGH
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT
USED ON MODEL AW139	
SCALE	1:1
DATE	2/26/2013
SHEET 36 OF 47	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		-63 CHANGED MATERIAL NOTE IN BOM.	7/1/2013	CFS	JAG
4	15-0337	-63 CH'D QTY. WAS 1 IS 2, CH'D TO SHEET METAL TOLERANCE.	10/26/2015	RJC	JAG
5	16-0164	-63 CH'D B/O INFO WAS 3/4 X 8 X 15-1/8 I.R. SPECIALIES IS 3/4 X 8 X 15-1/8 (CASE SOLUTIONS).	10/12/2016	SM	JAG
6	17-0031	-63 CH'D MAT'L WAS 17124 IS T-20.	1/24/2017	SM	JAG



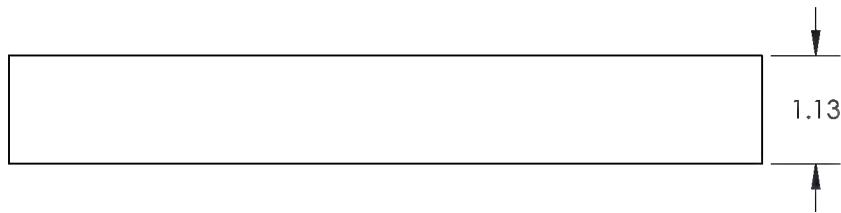
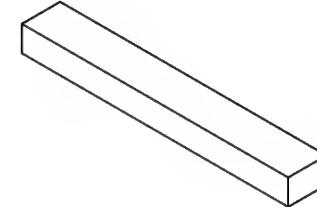
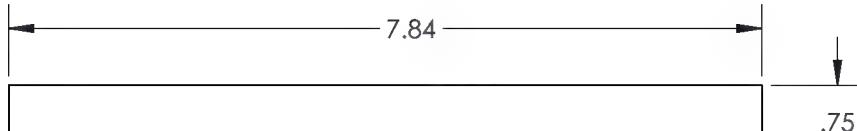
(-63)

FOAM

DART AEROSPACE	
TITLE	
TOOL, M/R BLADE LIFTING	
DWG NO.	RBW6205G00632-3G-63
REV	6
MAT'L T-20	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
HEAT	.XXX ± .010 FRACTIONS ± 1/8
TREAT	.XX ± .03 ANGLES ± 1°
FINISH	X ± .1 SURFACES = 125
SPEC	✓
DRAWN BY:	GILBERT
CHECKED:	CLOUGH
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT
USED ON MODEL	
AW139	
SCALE	1:4
DATE	2/26/2013
SHEET 37 OF 47	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		-65 CHANGED MATERIAL NOTE IN BOM.	7/1/2013	CFS	JAG
4	15-0337	-65 CH'D TO SHEET METAL TOLERANCE.	10/26/2015	RJC	JAG
5	16-0164	-65 CH'D B/O INFO WAS 3/4 X 1-1/8 X 8 I.R. SPECIALTIES IS 3/4 X 1-1/8 X 8 (I.R. SPECIALTIES)	10/12/2016	SM	JAG
6	17-0031	-65 CH'D MAT'L WAS 17124 IS T-20.	1/24/2017	SM	JAG



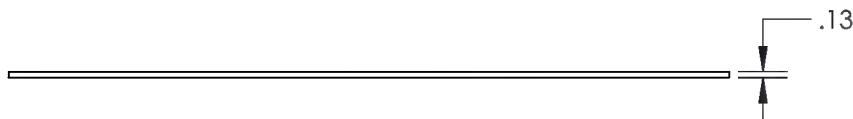
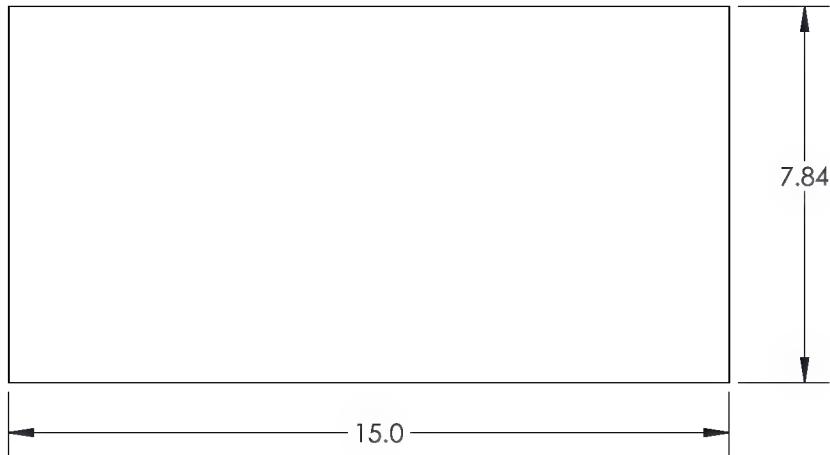
FOAM, ANGLE BLOCK

(-65)

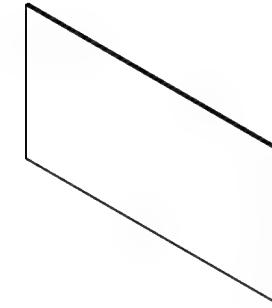
DART AEROSPACE	
TITLE	
TOOL, M/R BLADE LIFTING	
DWG NO. RBW6205G00632-3G-65 REV 6	
MAT'L T-20 UNLESS OTHERWISE SPECIFIED HEAT .XXX ± .010 DIMENSIONS ARE IN INCHES TREAT .XX ± .03 FRACTIONS ± 1/8 FINISH .X ± .1 ANGLES ± 1° SPEC SURFACES = 125 ✓ DRAWN BY: GILBERT CHECKED: CLOUGH OPPS APPR: ANDERSON QA APPR: LINDSAY USED ON MODEL APPROVED: GILBERT AW139 SCALE 1:2 DATE 2/27/2013 SHEET 38 OF 47	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
4	15-0337	-67 CH'D TO SHEET METAL TOLERANCE.	10/26/2015	RJC	JAG
6	17-0031	-67 CH'D MAT'L WAS 17124 IS T-20.	1/24/2017	SM	JAG



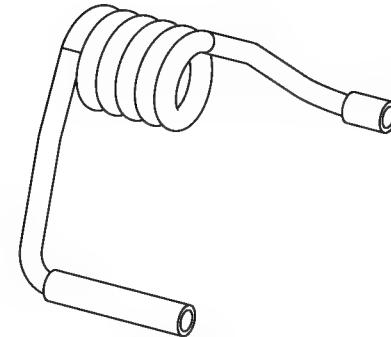
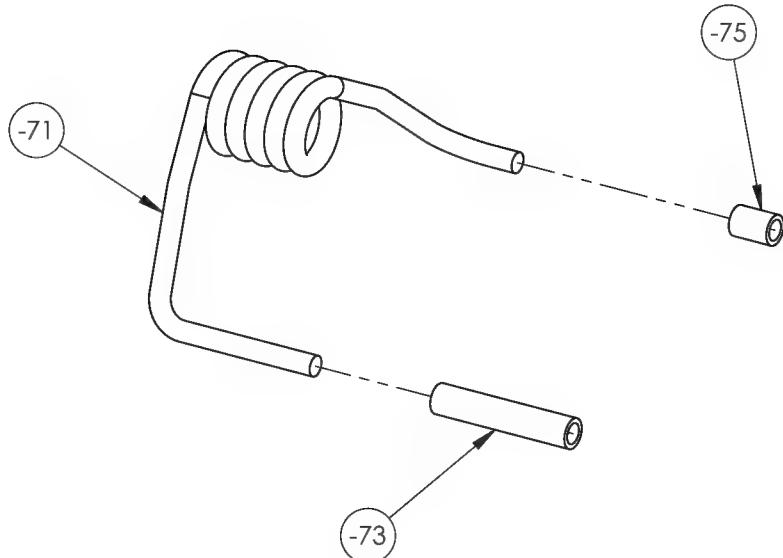
(-67)
FOAM BACKING



DART AEROSPACE	
TITLE	
TOOL, M/R BLADE LIFTING	
DWG NO. RBW6205G00632-3G-67 REV 6	
MAT'L NEOPRENE UNLESS OTHERWISE SPECIFIED HEAT DIMENSIONS ARE IN INCHES TREAT .XXX ± .010 FRACTIONS ± 1/8 FINISH .XX ± .03 ANGLES ± 1° X ± .1 SURFACES = 125 ✓ SPEC DRAWN BY: GILBERT CHECKED: CLOUGH OPPS APPR: ANDERSON QA APPR: LINDSAY APPROVED: GILBERT USED ON MODEL AW139 SCALE 1:4 DATE 2/27/2013 SHEET 39 OF 47	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	

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REV	ECR	REVISIONS	DESCRIPTION	DATE	INITIAL	APPROVED
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-69
SPRING ASSEMBLY

DART AEROSPACE	
TITLE	
TOOL, M/R BLADE LIFTING	
DWG NO.	RBW6205G00632-3G-69
REV	6
MAT'L	
HEAT	
TREAT	
FINISH	
SPEC	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
.XXX ± .005 FRACTIONS ± 1/8	
.XX ± .01 ANGLES ± 5°	
X ± .1 SURFACES = 125 ✓	
DRAWN BY:	GILBERT
CHECKED:	CLOUGH
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT
USED ON MODEL	
AW139	
SCALE	1:1.5
DATE	3/20/2013
SHEET 40 OF 47	

DART
AEROSPACE

TOOL, M/R BLADE LIFTING

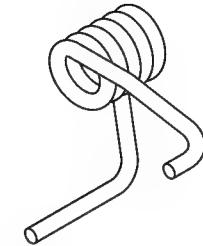
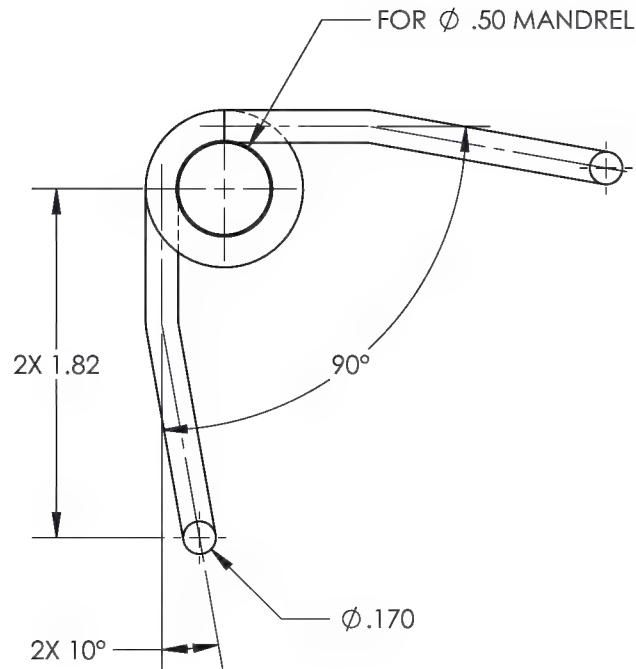
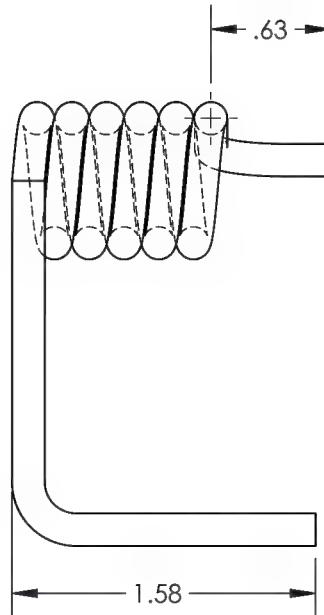
RBW6205G00632-3G-69

6

MAT'L	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
HEAT	.XXX ± .005	FRACTIONS ± 1/8
TREAT	.XX ± .01	ANGLES ± 5°
FINISH	X ± .1	SURFACES = 125 ✓
SPEC		
DRAWN BY:	GILBERT	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED:	CLOUGH	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR:	ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR:	LINDSAY	USED ON MODEL
APPROVED:	GILBERT	AW139
SCALE	1:1.5	DATE 3/20/2013
		SHEET 40 OF 47

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REVISIONS							
REV	ECR	DESCRIPTION			DATE	INITIAL	APPROVED
1		-71	ADDED NOTE 1 FOR ADDITIONAL SPRING INFORMATION. MATERIAL WAS STEEL IS S.S.		7/10/2013	RJC	DW
2		-71	ADDED NOTE 2 FOR ADDITIONAL SPRING INFORMATION.		4/28/2014	DPD	RJC
3	15-0017	-71	WIRE DIAMETER CH'D PER DENDOFF WAS \varnothing .155 IS \varnothing .170.		1/20/2015	RJC	JAG
4	15-0337	-71	DELETED NOTES 1 AND 2.		10/26/2015	RJC	JAG



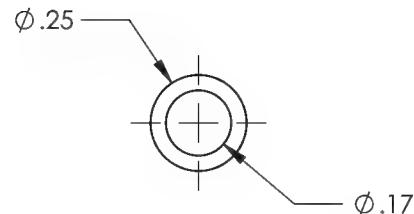
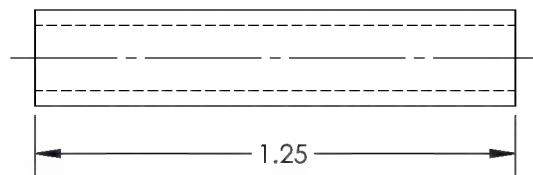
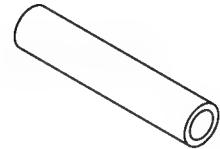
SPRING

(-71)

DART AEROSPACE	
TITLE	
TOOL, M/R BLADE LIFTING	
DWG NO. RBW6205G00632-3G-71 REV 6	
MAT'L S.S. UNLESS OTHERWISE SPECIFIED HEAT DIMENSIONS ARE IN INCHES TREAT .XXX ± .005 FRACTIONS ± 1/8 FINISH .XX ± .01 ANGLES ± 5° SPEC X ± .1 SURFACES = 125 ✓	
DRAWN BY: GILBERT CHECKED: CLOUGH OPPS APPR: ANDERSON QA APPR: LINDSAY APPROVED: GILBERT USED ON MODEL AW139	
SCALE 1:1	DATE 2/26/2013
SHEET 41 OF 47	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
3	15-0017	-73 CH'D TUBE ID WAS \varnothing .150 IS \varnothing .170, P/N WAS 5548K918 IS 5548K64.	1/20/2015	RJC	JAG
4	15-0337	-73 CH'D TO SHEET METAL TOLERANCE.	10/26/2015	RJC	JAG



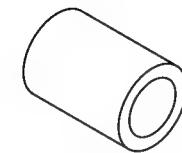
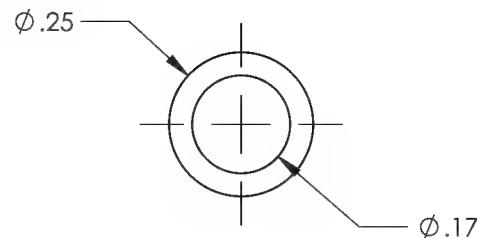
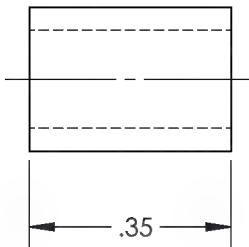
(-73)

TUBE, LONG

DART AEROSPACE	
TITLE	
TOOL, M/R BLADE LIFTING	
DWG NO. RBW6205G00632-3G-73 REV 6	
MAT'L NYLON UNLESS OTHERWISE SPECIFIED HEAT DIMENSIONS ARE IN INCHES TREAT .XXX ± .010 FRACTIONS ± 1/8 FINISH .XX ± .03 ANGLES ± 1° SPEC X ± .1 SURFACES = 125 ✓	
DRAWN BY:	GILBERT
CHECKED:	CLOUGH
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT
USED ON MODEL	AW139
SCALE	2:1
DATE	3/20/2013
SHEET 42 OF 47	

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REVISIONS						
REV	ECR	DESCRIPTION			DATE	INITIAL
1		-75 ADDED MISSING P/N BUBBLE.			7/1/2013	CFS
3	15-0017	-75 CH'D TUBE ID WAS \varnothing .150 IS \varnothing .170, P/N WAS 5548K918 IS 5548K64.			1/20/2015	RJC
4	15-0337	-75 CH'D TO SHEET METAL TOLERANCE.			10/26/2015	RJC



(-75)

TUBE, LONG

DART AEROSPACE	
TITLE	
TOOL, M/R BLADE LIFTING	
DWG NO. RBW6205G00632-3G-75 REV 6	
MATERIAL NYLON UNLESS OTHERWISE SPECIFIED HEAT DIMENSIONS ARE IN INCHES TREAT FRACTIONS \pm 1/8 FINISH ANGLES \pm 1° SPEC SURFACES = 125	
.XXX \pm .010 .XX \pm .03 X \pm .1	
DRAWN BY: GILBERT CHECKED: CLOUGH OPPS APPR: ANDERSON QA APPR: LINDSAY APPROVED: GILBERT	
USED ON MODEL AW139	
SCALE 3:1	DATE 3/20/2013
SHEET 43 OF 47	

DART
AEROSPACE

TOOL, M/R BLADE LIFTING

DWG NO. RBW6205G00632-3G-75 REV 6

MATERIAL NYLON UNLESS OTHERWISE SPECIFIED
HEAT DIMENSIONS ARE IN INCHES
TREAT FRACTIONS \pm 1/8
FINISH ANGLES \pm 1°
SPEC SURFACES = 125

.XXX \pm .010
.XX \pm .03
X \pm .1

DRAWN BY: GILBERT
CHECKED: CLOUGH
OPPS APPR: ANDERSON
QA APPR: LINDSAY
APPROVED: GILBERT

USED ON MODEL
AW139

SCALE 3:1 DATE 3/20/2013 SHEET 43 OF 47

1. BREAK ALL SHARP EDGES
.015 x 45° OR .015R
2. DIMENSIONAL LIMITS APPLY AFTER PLATING
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

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REV	ECR	REVISIONS	DESCRIPTION	DATE	INITIAL	APPROVED
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ARIAL FONT, HT: .50

MAX LOAD 150 LBS

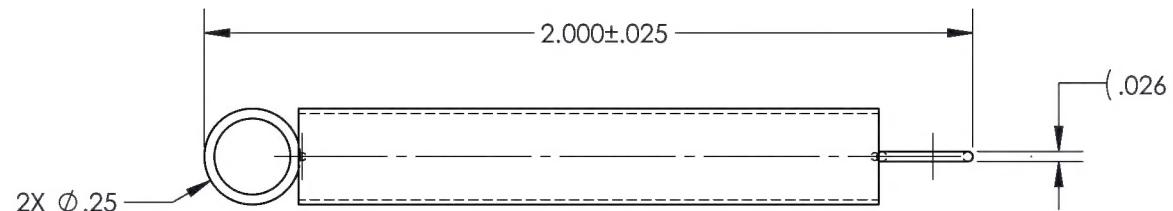
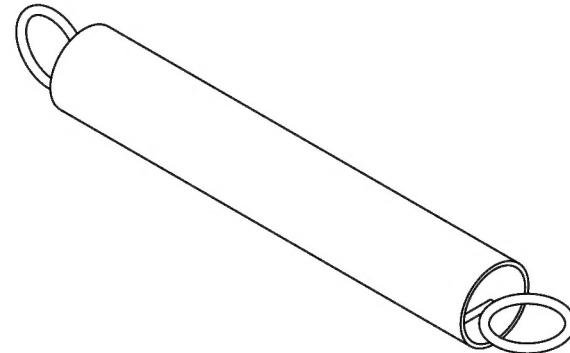
(-77)

STICKER

	
TITLE	
TOOL, M/R BLADE LIFTING	
DWG NO.	RBW6205G00632-3G-77
REV	6
MATERIAL VINYL, BLACK	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
HEAT	.XXX ± .005 FRACTIONS ± 1/8
TREAT	.XX ± .01 ANGLES ± 5°
FINISH	X ± .1 SURFACES = 125
SPEC	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	
DRAWN BY:	GILBERT
CHECKED:	CLOUGH
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT
USED ON MODEL	
AW139	
SCALE	1:1
DATE	2/28/2013
SHEET 44 OF 47	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		-113 ADDED DRAWING TO MANUFACTURE PART.	7/10/13	RJC	JAG
4	15-0337	-113 CH'D TO SHEET METAL TOLERANCE.	10/29/2015	RJC	JAG



(-113)

LATCH SPRING

DART AEROSPACE	
TITLE	
TOOL, M/R BLADE LIFTING	
DWG NO.	RBW6205G00632-3G-113
REV	6
MATERIAL 302 S.S.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
HEAT	.XXX ± .010 FRACTIONS ± 1/8
TREAT	.XX ± .03 ANGLES ± 1°
FINISH	X ± .1 SURFACES = 125 ✓
SPEC	
DRAWN BY:	CLOUGH
CHECKED:	CLOUGH
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT
USED ON MODEL	
SCALE	1:1
DATE	7/10/2013
SHEET 45 OF 47	

DART
AEROSPACE

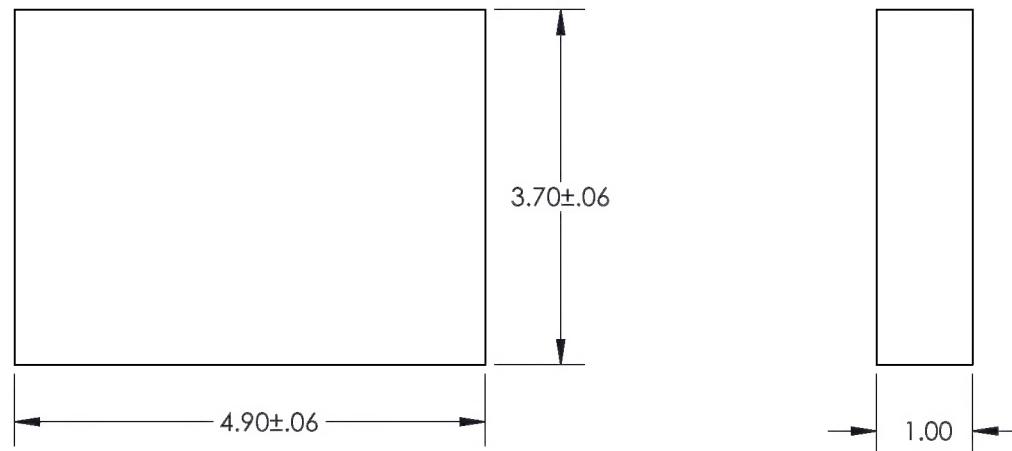
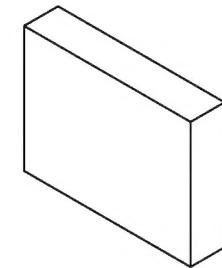
TOOL, M/R BLADE LIFTING

DWG NO. RBW6205G00632-3G-113 REV 6

MATERIAL	302 S.S.	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT	.XXX ± .010	FRACTIONS ± 1/8
TREAT	.XX ± .03	ANGLES ± 1°
FINISH	X ± .1	SURFACES = 125 ✓
SPEC		
DRAWN BY:	CLOUGH	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED:	CLOUGH	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR:	ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR:	LINDSAY	USED ON MODEL
APPROVED:	GILBERT	
SCALE	1:1	DATE 7/10/2013
		SHEET 45 OF 47

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
3	15-0017	-133 ADDED FOAM PAD.	1/20/2015	RJC	JAG
4	15-0337	-133 CH'D TO SHEET METAL TOLERANCE.	10/26/2015	RJC	JAG



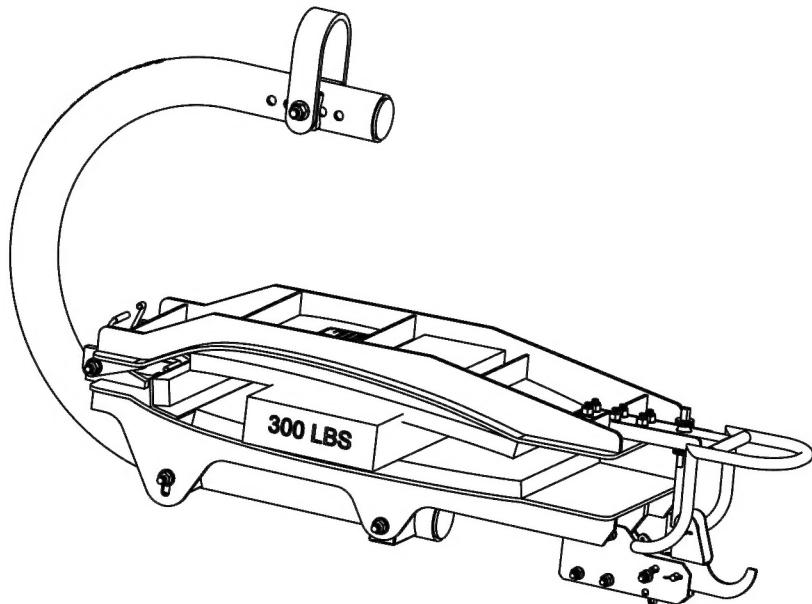
-133

FOAM PAD

DART AEROSPACE	
TITLE	
TOOL, M/R BLADE LIFTING	
DWG NO. RBW6205G00632-3G-133 REV 6	
MATERIAL Y20 BLACK UNLESS OTHERWISE SPECIFIED HEAT DIMENSIONS ARE IN INCHES TREAT FRACTIONS $\pm 1/8$ FINISH ANGLES $\pm 1^\circ$ SPEC SURFACES = 125	
DRAWN BY: CLOUGH CHECKED: CLOUGH OPPS APPR: ANDERSON QA APPR: LINDSAY APPROVED: GILBERT	
1. BREAK ALL SHARP EDGES $.015 \times 45^\circ$ OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
SCALE	1:1
DATE	1/20/2015
USED ON MODEL	
AW139	
SHEET 46 OF 47	

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REV	ECR	REVISIONS	DESCRIPTION	DATE	INITIAL	APPROVED
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FIRST ARTICLE WEIGHT TEST

INSPECTION & TESTING PROCEDURES FOR THE
RBW6205G00632-3G, M/R BLADE LIFTING TOOL.
THIS ASSEMBLY IS DESIGNED TO LIFT A MAIN ROTOR.
THIS ASSEMBLY SHOULD BE INSPECTED BEFORE EACH USE.
REPLACE ANY ITEMS THAT ARE DAMAGED OR SUSPECTED
OF DAMAGE BEFORE USING!

FIRST ARTICLE WEIGHT TEST

1. AFTER INSPECTION, PLACE 300 LBS. IN M/R BLADE LIFTING TOOL. LIFT M/R BLADE LIFTING TOOL USING AN APPROPRIATE LIFTING DEVICE, FOR AT LEAST 5 MINUTES, CONTINUALLY CHECKING FOR CRACKS, DEFLECTION, OR DISTORTION.
3. REMOVE WEIGHT AND RE-INSPECT TOOL, CHECKING FOR STRESS CRACKS, BENDING, OR DISTORTIONS.

INSPECTOR: _____

TESTER: _____

S.N.: _____

DATE: _____

DART
AEROSPACE

190 S. Danebo Ave., Eugene, OR. 97402
1-800-556-4166

e-mail: sales@dartaero.com
dartaerospace.com

TITLE		TOOL, M/R BLADE LIFTING	
DWG NO.	RBW6205G00632-3G	REV	6
SCALE	1:8	DATE	2/21/2013
		SHEET	47 OF 47